GOVERNMENT OF TAMILNADU

PHYSICAL EDUCATION

TEACHER'S RESOURCE BOOK

CLASSES : 6 - 10

UDARKALVI - UYIRKKALVI

Department of School Education

Untouchability is Inhuman and a Crime

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Government of Tamil Nadu

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PREFACE

“Movement is life and life is movement”.

Udarkalvi Uyirkkalvi

The Department of School Education has launched a comprehensive physical education programme for holistic development across all the schools of the state. This initiative aims not only to boost physical fitness but also to foster character building, social skills and overall well-being among students.

The regular lifestyle of students was affected due to the restrictions that prevailed during the COVID-19 pandemic period and thereafter. They were unable to use the playgrounds for regular physical activities, which reduced the functioning of their immune system. To change the situation, proper physical education curriculum for students is mandatory. Hence, the Department of School Education has taken steps to implement a physical education curriculum. This initiative is not merely a response to current trends but a proactive step towards nurturing all-rounded students who are equipped to face the challenges of the 21st century.

The curriculum framework-2017 by the Tamil Nadu government emphasises, “It is important to make our students understand and feel proud of our rich cultural heritage, tradition, history, art and literature”. Keeping this in mind, this initiative focuses on the students’ overall development of physical and cognitive abilities with a wide range of activities that will help to nurture their values and attitudes towards our culture and heritage. Special provisions are made to ensure that children with special needs (CWSN) are fully integrated into the programme. Adaptations and modifications are implemented to make physical activities accessible and enjoyable for all students, regardless of their physical abilities or limitations.

In the Tamil literature “Aathichoodi”, Avvaiyar says the importance of the body as “**உடலினை உறுதி செய்**” which means build the body strong. In the secondary level age group, motor skill acquisition and hormonal changes occur. Hence, physical literacy, physical development, sports education, tamil folk games, joyful games, sports tournaments, schemes, asanas and breathing techniques, sports injuries, safety education, first-aid and career opportunities in sports are included to develop neuromuscular co-ordination and basic skills in sports and games and to raise awareness regarding higher education and placement opportunities. It paves the way to acquire sports skills and shape their sense of responsibility.

This programme provides opportunities for students to excel and win medals at state, national and even international levels, further enhancing their sense of achievement and pride in their physical endeavours. Let us wholeheartedly welcome this initiative and collaborate towards creating a healthy and happy future for the students.

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General Guidelines

Tips for physical education teachers to effectively implement various aspects of physical education, such as Physical literacy, Sports education, Safety education and Inclusive education.

1. Physical Literacy:

Physical literacy refers to proficiency in fundamental movement skills and the understanding of concepts related to physical activity. Just as numeracy and literacy are essential for academic success, physical literacy is crucial for learning a healthy and active lifestyle.

- **Start with the basics:** Focus on fundamental movement skills like running, jumping, throwing and catching to build a foundation for more complex movements.
- **Progress gradually:** Introduce skills and concepts progressively, ensuring students understand and master them.
- **Provide variety:** Offer a variety of activities and sports to develop diverse movement patterns and abilities.
- **Encourage practice:** Provide opportunities for regular practice and reinforcement of skills in different contexts.

2. Physical Development:

Physical development is the progressive advancement of a person's physical abilities, including motor skills and overall bodily function. By nurturing physical development through exercise, proper nutrition and healthy habits, individuals can optimise their physical health and enhance their overall quality of life.

- **Individualise activities:** Adapt activities to suit the developmental level and abilities of students, providing challenges that are appropriate and achievable.
- **Focus on fitness:** Incorporate exercises and activities that promote cardiovascular fitness, muscular strength, flexibility and endurance.

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- **Monitor progress:** Track students' physical development over time and provide feedback to help them set and achieve goals.

3. Sports Education:

Sports education involves integrating sports and physical activities into the academic curriculum to promote holistic development. It encompasses teaching sportsmanship, fair play, respect and perseverance, essential for personal and social growth.

- **Teach rules and strategy:** Provide clear explanations of the rules and strategies for various sports, emphasising fair play and sportsmanship.
- **Organise tournaments:** Arrange intra-class and interschool tournaments to give students opportunities to apply their skills in competitive settings.
- **Foster teamwork:** Emphasise the importance of teamwork, communication and cooperation in team sports and encourage positive interactions among students.

4. Track and Field Events:

- **Cover all events:** Introduce students to a variety of track and field events including running, jumping, throwing and relay races.
- **Teach proper technique:** Focus on teaching correct techniques for each event to maximise performance and reduce the risk of injury.
- **Provide practice opportunities:** Set up drills and practice sessions for students to refine their skills in track and field events.

5. Tamil Folk Games and Joyful Games:

Joyful games are recreational activities that prioritise enjoyment, fun and positive experiences. Ultimately, they enrich lives by spreading happiness and foster a sense of community.

Tamil folk games encompass traditional games and recreational activities passed down through generations in Tamil culture. They serve as a rich cultural heritage, reflecting the community's values, customs and social dynamics.

- **Celebrate culture:** Introduce students to traditional Tamil games and folk, highlighting their cultural significance and promoting pride in heritage.
- **Make it fun:** Incorporate games and activities that are enjoyable and engaging, encouraging active participation and enthusiasm.
- **Share stories:** Share stories and anecdotes related to Tamil folk games to enrich students' understanding appreciation of their cultural roots and enrich their values.

6. Asanas and Breathing Techniques:

Asanas are physical postures, practised in yoga. They serve as a holistic approach to wellness, aligning body, mind and spirit for optimal living. Breathing technique is an integral part of practices like asana and meditation, which involves conscious control and manipulation of breath patterns to enhance physical, mental and emotional well-being.

- **Teach proper form:** Demonstrate and explain the correct alignment and technique for various asanas (poses) and breathing exercises.
- **Emphasise mindfulness:** Encourage students to focus on their breath and cultivate awareness of their body and mind during asana practice.

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- **Provide modifications:** Offer modifications and adaptations for students who are differently abled to ensure inclusivity and accessibility.

7. Sports Injuries and Safety Education:

Sports injuries refer to physical harm or trauma sustained during sports activities ranging from minor sprains to severe concussions. Safety education involves teaching individuals about potential hazards, risks and preventive measures to ensure their well-being.

- **Prioritise safety:** Emphasise the importance of warm-ups, stretching and proper techniques to prevent injuries during physical activity.
- **Educate on injury management:** Teach students how to recognise and respond to common sports injuries, including basic first aid and when to seek medical attention.
- **Promote equipment safety:** Stress the importance of using appropriate protective gear and equipment such as helmets and pads for sports activities.

8. Inclusion of Children with Special Needs:

- **Individualised instruction:** Adapt activities and instruction to meet the unique needs and abilities of students with special needs, providing appropriate accommodations and support.
- **Facilitate inclusion:** Create a supportive and inclusive environment where all students feel valued and included, promoting empathy, respect and understanding among peers.
- **Collaborate with specialists:** Work with special education teachers.

Methods of Teaching

Teaching physical education to students from standard VI to X requires a diverse range of methods to engage learners effectively. Here are some approaches commonly used:

1. **Demonstration:** Teachers can demonstrate proper techniques for various exercises, sports skills and activities. Visual learning aids, such as videos or live demonstrations, help the students to understand the correct form of execution.
2. **Instructional Method:** Incorporating a method that teaches specific skills or concepts related to physical education can make learning enjoyable and interactive. This method focuses on teamwork, strategy, coordination and other fundamental skills.
3. **Part Method:** This approach involves breaking down complex skills or movements into smaller parts and teaching them separately before integrating them into the whole skill. For example, in teaching a basketball layup, students might first learn proper footwork, then practiSe arm motion and finally combine both aspects into a complete layup.
4. **Part-by-Part Method:** Similar to the part method, this approach focuses on teaching individual components of a skill, but it emphasises sequential mastery of each part before progressing to the next. Students master one part before moving on to the next, ensuring a solid foundation before advancing. For instance, in teaching a tennis serve, students first learn the grip then focus on the tossing motion followed by the swing.
5. **Whole-Part-Whole method:** In physical education, students are provided with a holistic understanding of the skill or activity.
   - **Whole:** Begin by demonstrating or introducing the complete skill or activity to the students. For example, when teaching a volleyball serve, demonstrate the entire serving motion, from the starting position to the contact with the ball and follow-through.

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- **Part:** After demonstrating the whole skill, break it down into its component parts. Focus on teaching each part separately, emphasising proper technique and execution. For the volleyball serve, this might involve isolating the arm swing, footwork and hand placement.
- **Whole (again):** Once students have had the opportunity to practise and master the individual parts of the skill, reintegrate them back into the whole skill. Encourage students to apply what they've learnt by performing the complete skill, incorporating all the individual parts they've practised.

6. **Set Method:** In this method, a set of related skills or exercises is taught together in a structured sequence. For example, a set method could be involved while teaching a series of asanas in a specific order, gradually increasing the difficulty or intensity.
7. **At-will Method:** This method gives students autonomy to choose the activities or exercises they want to participate in, based on their interests, preferences, or fitness goals. Teachers provide guidance and support as students select and engage in activities that align with their individual needs and motivations. This approach promotes student ownership and autonomy in their physical education experience.
8. **Imitation Method:** This method involves demonstrating a skill or activity for students to observe, then asking them to replicate the demonstrated action. For example, a teacher might demonstrate a proper push-up technique and students would imitate the movement while receiving feedback on their form. This method emphasises observational learning and can be effective for teaching basic skills or movements.
9. **Skill Stations:** Skill stations allow students to take turns and learn different activities, practising various skills or drills in small groups. This approach promotes individualised learning and provides opportunities for hands-on practice.
10. **Peer Teaching:** Assigning students to teach specific skills or activities to their peers, encourages collaboration and reinforces learning. Peer teaching also helps to build leadership skills and fosters a supportive learning environment.
11. **Problem-Based Learning:** Presenting students with real-life scenarios or challenges related to physical activity and asking them to find solutions, encourages critical thinking and decision-making skills. This method promotes active learning and application of knowledge.
12. **Inquiry-Based Learning:** Encouraging students to ask questions and explore topics related to physical education which promotes curiosity and deeper understanding. Teachers can facilitate discussions, research projects or experiments to investigate concepts like nutrition, biomechanics, sports psychology, etc.
13. **Technology Integration:** Incorporating technology such as fitness apps, wearable devices, or interactive software can enhance learning experiences in physical education. Virtual simulations, online resources and video analysis tools provide additional opportunities for skill development and feedback.
14. **Adventure Education:** Outdoor activities, adventure sports and team-building challenges provide unique opportunities for experiential learning and personal growth. These activities promote risk-taking, problem-solving, leadership and resilience abilities.
15. **Differentiated Instruction:** Recognising and accommodating students' diverse learning needs and abilities is essential in physical education. Teachers can modify activities, provide alternative options, or offer additional support to ensure all students participate and succeed in sports.

Note: **Teachers should teach activities ensuring the health, environment and safety of students while engaging them in games, exercises, asanas and breathing exercises.**

Warm-up Exercises

Arm circles: Rotate arms forward and backward in circular motion.

Shoulder shrugs: Lift the shoulders up towards the ears, then relax them down.

Neck stretch: Slowly tilt the head from side to side and forward to backward.

Torso twists: Stand with feet shoulder-width apart and twist torso from side to side.

Jumping jacks: Jump feet apart while raising arms overhead, then return to the starting position.

Skipping in place: Lift knees high while skipping on the spot, swinging arms in rhythm.

Light apparatus warm-up: Perform gentle swings or circles with rhythmic apparatus like ribbons or hoops.

Indigenous dance movements: Incorporate traditional dance steps or movements from local cultural practices.

Dynamic movements: Perform leg swings and arm swings, to prepare muscles for explosive movements.

Joint rotations: Rotate wrists, ankles, shoulders and hip to improve mobility and flexibility.

Dynamic stretches: Perform leg swings, arm circles and trunk rotations to loosen up muscles and joints.

Jogging: Start with a light jog to elevate heart rate and increase the blood flow to muscles.

High knees: Lift knees up towards chest while jogging to activate hip flexors and to warm-up leg muscles.

Butt kicks: Kick heels up towards the gluteus while jogging to warm-up hamstrings and calves.

Agility ladder drills: Perform various footwork patterns such as high knees, side shuffles and quick steps through an agility ladder.

Dynamic leg swings:

- **Hip flexors:** Activate the hip flexors, hamstrings and quadriceps, improving flexibility and range of motion in the legs.
- **Side-to-side swings:** Engage the adductors and abductors, promoting lateral mobility and stability in the hip.
- **Across-the-body swings:** Enhance hip mobility and coordination while stretching the gluteus and outer hip muscles.

Dynamic arm swings:

- **Across-the-body swings:** Mobilise the shoulders, chest and upper back, preparing the upper body for dynamic movements.
- **Overhead swings:** Loosen up the shoulder joints and improve shoulder flexibility.

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- **Side swings:** Activate the deltoids and trapezius muscles, promoting shoulder stability and mobility in various planes of motion.

Leg Raises:

- **Front leg raises:** Strengthen the hip flexors and core muscles, improving balance and stability during leg movements.
- **Side leg raises:** Target the abductors and gluteus medius, enhancing hip abduction strength and stability.
- **Back leg raises:** Activate the hamstrings and gluteus, improving hip extension and posterior chain strength.

Ankle circles: Improve ankle mobility and proprioception, reducing the risk of ankle sprains and enhancing overall lower limb function and agility.

Dynamic trunk twists: Mobilise the thoracic spine and oblique muscles, improving spinal rotation and core stability for rotational movements.

Hurdle Mobility Drills: Enhance agility, coordination and dynamic balance, mimicking the movement patterns involved in sports and athletic activities.

Dynamic Hamstring Stretch: Increases flexibility in the hamstrings and lower back, reduces the risk of muscle strain and improves functional movement patterns like bending and stretching.

Warm-Down Routine

After physical activity, it's essential to cool down properly to help the body recover and prevent injury. Here's a simple warm-down routine to follow:

1. **Walking:** Begin by walking slowly for about 5-10 minutes. This helps to gradually lower the heart rate and relax the muscles back to the resting state.
2. **Stretching:** Perform static stretches for major muscle groups that were involved in the activity. Hold each stretch for 15-30 seconds without bouncing. Focus on areas like calves, hamstrings, quadriceps, groin, hips, lower back, shoulders and chest.
3. **Deep Breathing:** Spend a few minutes and practise deep breathing exercises. Inhale deeply through nose, expanding the belly and then exhale slowly through mouth. This can help to relax the body and reduce any remaining tension.
4. **Hydration:** Drink plenty of water to rehydrate the body after exercise. Aim to replace any fluid loss during workout.
5. **Reflection:** Take a moment to reflect on the workout. Consider what went well and any areas for improvement. This can help to learn from the experience and make adjustments for future sessions.
6. **Light Cardio:** After walking, a student can engage in some light cardiovascular activity such as cycling on a stationary bike or using an elliptical machine at a low intensity. This can further help in gradually reducing the heart rate and promote circulation.
7. **Dynamic Stretching:** While static stretching is great for flexibility, dynamic stretching involves moving parts of the body through a range of motion. Examples include leg swings, arm circles, hip

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circles and trunk rotations. Dynamic stretching helps to improve flexibility, mobility and muscle coordination.

8. **Pilates:** Consider ending the workout with a few pilates poses to enhance flexibility, balance and core strength. Poses like downward-facing dog, child's pose, cat-cow stretch and spinal twists can help to release tension and promote relaxation.
9. **Self-Massage:** Use a tennis ball or a massage roller to perform self-myofascial release techniques on areas of tightness or discomfort. Apply gentle pressure to target knots or trigger points in the muscles to gradually release tension.
10. **Progressive Relaxation:** Lie down in a comfortable position and practise progressive muscle relaxation. Tense each muscle group in the body for a few seconds, then release and relax completely. Start with the toes and work on the head, focusing on each muscle group individually.
11. **Cool-down Walk:** Finish the warm-down routine with another short walk to allow the body to gradually return to its pre-exercise state. This can also be a good opportunity for mental relaxation and reflection on the workout.

During the warm-down routine, pay attention to body and adjust exercise intensity. Provide guidance when the students feel discomfort. Prioritise the cool down exercises based on personal preferences, fitness level and the demands of the activity to enhance recovery, flexibility and well-being.

12 Stage Asana

(This is generally known as 'Surya Namaskar')

1. **Pranamasana:** Stand erect with the legs together facing east. Palms should be kept together in front of the chest.
2. **Hastauttanasana (Raised Arm Pose):** Breathe in, take the hands above the head and arch back-wards.
3. **Pathahasthasana (Standing Forward Bend):** Breathe out, bend forward and touch the knees with the forehead. Keep the palms on the floor on either side of the legs.
4. **Ashwa Sanchalanasana (Equestrian Pose):** Breathe in, take the right leg back, bend the left knee forward and look up.
5. **Parvathasana (Stick Pose):** Breathe out, take the left leg back, resting only on the toes and palms. Raise the hip and form an inverted 'V' shape.
6. **Ashtangasana (Salute with Eight Parts or Points):** Exhale, bend the elbows and rest the knees, chest and forehead on the floor.
7. **Bhujangasana (Cobra Pose):** Breathe in, raise the head and trunk and arch back without changing the position of hands and feet.
8. **Parvathasana (Mountain Pose):** Breathe out, raise the hip up and make an inverted V shape.
9. **Ashwa Sanchalanasana (Equestrian Pose):** Breathe in, bring the left leg forward with the knee bent and arch back as in step 4.
10. **Pathahasthasana (Standing Forward Bend):** Breathe out, bring the right foot close to the left foot, straighten both knees and touch the knees with the forehead as in step 3.

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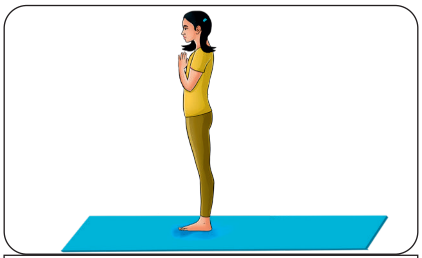
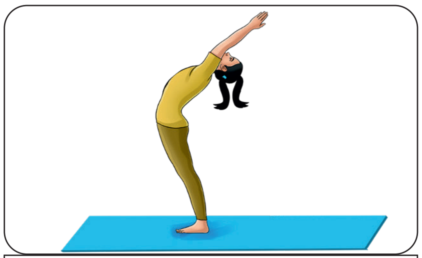
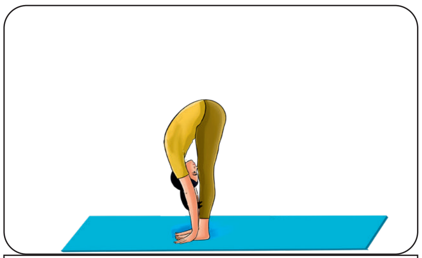
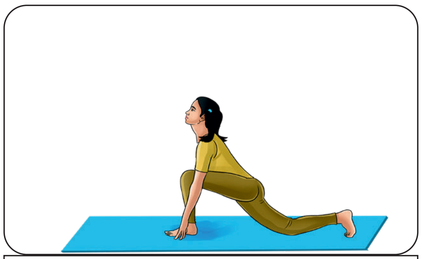
11. **Hastauttanasana (Raised Arm Pose):** Deep breathe in, come up, raise both arms up and arch back.

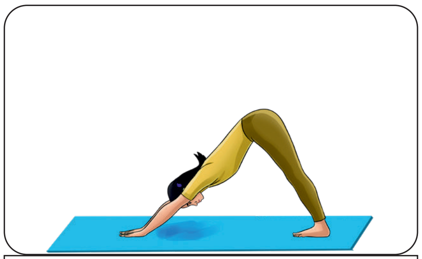
12. **Pranamasana (Prayer Pose):** Keep the body erect. Palms should be kept together in front of the chest.

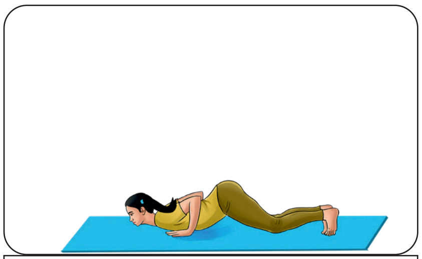

1. Pranamasana

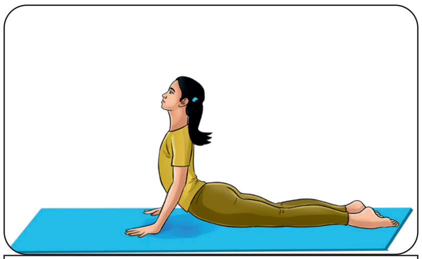

2. Hastauttanasana

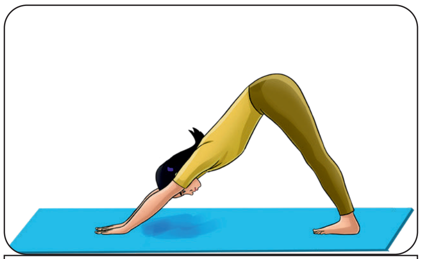

3. Pathahasthasana

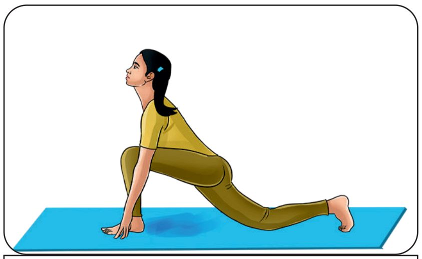

4. Ashwa Sanchalanasana


5. Parvathasana


6. Ashtangasana


7. Bhujangasana


8. Parvathasana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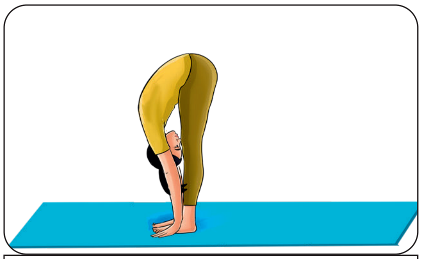
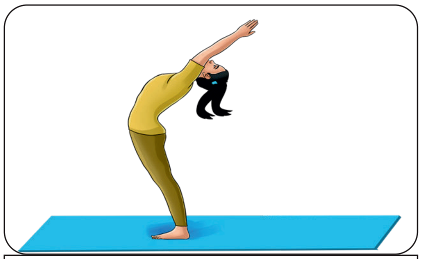
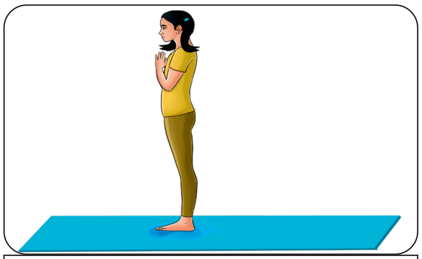

10. Pathahasthasana


11. Hastauttanasana


12. Pranamasana

Savasana

Savasana is a relaxing pose and is performed at the end of the session.

Starting position: Lie supine on the floor, legs apart at a comfortable and hands kept at a distance of about six inches from the body.

- Keep palms upwards, fingers naturally flexed and eyes closed.
- Breathing should be very slow. The head remains straight/sideward.

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Lesson Plan Design

General Lesson

S. No.	Methods of Physical Education Lesson	Duration 40 min
1.	Assembly and Roll Call	2 min
2.	Warm-Up Part	4 min
3.	Formal Part	8 min
4.	Special Part	12 min
5.	Recreation Part	12 min
6.	Assembly and Dismissal	2 min

Particular Lesson

S. No.	Methods of Physical Education Lesson	Duration 40 min
1.	Assembly and Roll Call	2 min
2.	Suitable Warm-Up Exercises	5 min
3.	Teaching the Skill	6 min
4.	Practising the Skill	15 min
5.	Lead Up Activity	10 min
6.	Assembly and Dismissal	2 min

Note – Assembly and Roll Call, Assembly and Dismissal to be done in all Physical Education Classes.

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Class 6

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Class 6
Unit 1

Physical Literacy

Physical literacy is the cornerstone of an active life, involving the mastery of fundamental movement skills and understanding concepts like balance, coordination, agility and flexibility. Developing physical literacy at an early stage empowers individuals to engage confidently in various sports activities and recreational pursuits like dancing, hiking, cycling and swimming. This holistic approach to physical movement fosters lifelong well-being, preventing injuries and promoting overall health. Quality physical education programs, sports involvement, recreational activities and community initiatives are vital for nurturing physical literacy and enhancing wellness.

A. Health-Related Physical Fitness

Cardiovascular Endurance

Cardiovascular Endurance is the ability of the heart, blood vessels and respiratory system to deliver oxygen during sustained activity. **Running** enhances cardiovascular health, reducing resting heart rate and improving oxygen consumption. Start with shorter, comfortable runs, gradually increase the duration. Set achievable goals and track progress. In schools, 600 and 800-metre runs assess the endurance in the World Beaters Talent (WBT) test.

Jogging: It is a steady, moderate aerobic exercise that boosts heart health by enhancing cardiovascular endurance. Start jogging slowly and gradually increase the pace. Focus on jogging for a set time rather than distance, aiming for 5-10 minutes. As endurance improves, add intervals of higher intensity. This strengthens the heart muscle, improving its efficiency in pumping blood and reducing the risk of heart disease and stroke.

Cycling: It improves cardiovascular health by enhancing heart and lung function, circulation and endurance. Teach proper cycling techniques, including setting off and pedalling smoothly. Emphasise road rules and safety. Children should do cycling within their target initially for 10 minutes and gradually increase it to 30 minutes. Ensure breaks for hydration and rest and end with a gentle cool down exercises to normalise heart rates and to prevent muscle stiffness.

Swimming: It improves cardiovascular endurance by engaging large muscle groups, enhancing heart and lung function and promoting better blood circulation. Techniques like continuous laps, interval training, sprints, treading water and water aerobics are effective for children. Focus on maintaining proper technique and incorporate breath control drills and a gentle cool-down to prevent muscle soreness. Prioritise safety with adequate supervision and ensure children are comfortable in the swimming pool.

Muscular strength and endurance: They are vital for daily activities, reducing the risk of injury and enhancing efficiency. Strength refers to the maximum force muscles can exert, while endurance is their ability to contract repeatedly without fatigue. **Simple bodyweight exercises** can effectively improve both. **Push-ups** strengthen the upper body, including variations like staggered, incline and decline. Squats strengthen lower body muscles, while lunges work legs and glutes, with variations like forward, reverse, walking and stationary lunges. Proper form and gradual progression are the keys to build strength and endurance safely. Incorporate these exercises regularly to improve the overall muscular fitness and functional capacity.

Flexibility: The range of motion in a joint is called flexibility. It is vital for bending, reaching and twisting. It's enhanced by stretching, with static flexibility involving holding a stretch and dynamic flexibility which includes moving joints through a full range of motion. Static stretches include hamstring, quadriceps, calf, shoulder and triceps stretches, held for 15-30 seconds each. Dynamic flexibility exercises like leg swings, arm circles, lunge with torso twist, high kicks and hip circles improve joint mobility actively. Incorporate these stretches into the routine to enhance flexibility, posture and functional performance in daily activities.

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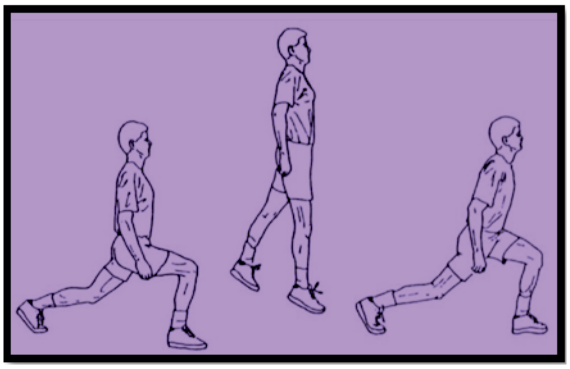
Lunge Jumps



- Begin in a staggered stance, right foot forward and left foot backward.
- Bend the knees into a lunge, as low as possible.
- Spring up into the air as high as possible, keep the hands on hip.
- Land softly on the balls of the feet and lower back into the lunge, complete 8 to 16 repetitions before changing the legs.

Mountain Climbers

- Make sure to scatter the weight evenly between the hands and toes.
- Check the form, hands should be shoulder-width apart, back flat, abdomen engaged and head in alignment.
- Pull the right knee closer to the chest as far as possible.
- Switch legs, pull one knee out and bring the other knee in.
- Keep the hips down and pull the knees in and out as far and as fast as possible. Alternate inhaling and exhaling during each leg change.

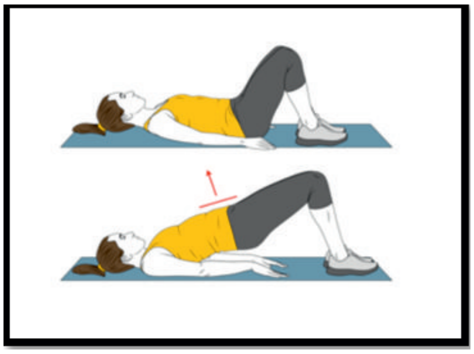
Squat Jumps

- Begin with feet about hip-distance apart and engage the core.
- Squat as low as possible, touch the ground using the fingertips if possible.
- Jump up as high as possible, sweeping the arms overhead.
- Land with soft knees back into the squat position and repeat for 30 to 60 seconds.

Modified Side Plank

- Lie down to the right side on an exercise mat with the left leg lying directly over the right leg and bend the knees to a comfortable position.
- Raise the upper body with the support of the right arm, right elbow should bend to 90° and be positioned directly under the shoulder.
- Hold for three deep breaths.

Pelvic Bridging



- Lie down on supine position with knees bent.
- Tighten the muscles of the stomach.
- Raise the hips off the floor until they are aligned with the knees and shoulders.
- Hold for 20-30 sec and repeat for 3 sets. Recovery period 40-50 sec.

B. Performance-Related Physical Fitness:

Speed Drills: Speed and agility are crucial facets of physical fitness. Speed denotes swift movement over a distance, while agility involves quick direction changes with control and balance. Training exercises like sprints, agility ladder drills, cone drills and plyometrics enhance both attributes. Improving speed and agility not only boosts athletic performance but also lowers injury risk during physical activities.

30- Meter Sprints: Mark a 30-meter distance on the ground, have students sprint at maximum effort, focusing on proper running form. Repeat with 4-6 repetitions to increase the fitness level.

Shuttle Runs : Set up markers 10-20 meters apart, have students sprint back and forth touching the ground at each end, focusing on quick acceleration, deceleration, sharp turns and perform 4-6 repetitions. If necessary, increase the repetitions.

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Flying Sprints : Mark a 20-30 meter distance on the ground, instruct students to start running at a moderate pace for the first 10 meters, gradually accelerating to a maximum speed for the rest of the distance, emphasising proper form and complete 4-6 repetitions with sufficient rest between each sprint.

Hill Sprints : Students sprint uphill for about 20-30 meters, focusing on knee drive and arm movements, followed by walking or jogging for recovery. Repeat 4-6 times with adjustments to the incline if necessary.

Partner Relays : Students pair up, sprinting back and forth over a marked distance of 20-30 meters, focusing on quick exchanges and intensity throughout the relay, with each student performing 4-6 repetitions while alternating roles.

Reaction Sprints : Students lineup on the starting line facing the other side and upon hearing a signal, such as a whistle or a clap, they turn around, sprint to the finish line emphasising explosive starts and rapid acceleration. They perform 4-6 repetitions.

Agility Ladder Exercises: Athletes and fitness enthusiasts use agility ladders for drills that improve quickness, agility and total athletic skills.

One feet in: Alternate stepping by placing one foot in each square, starting with the left foot, then the right and so on.

Two Feet In: Students should step in each square with both feet, moving forward along the ladder, focusing on being quick and coordinated.

Two in Two out Feet: In this drill, step in each square with both feet and then step out to the sides of the square before stepping back in and moving forward.

Hop: Hop forward in each box as the other foot remains in the air at all times.

Zigzag hop: First, hop into the first square, then hop forward and to the left.

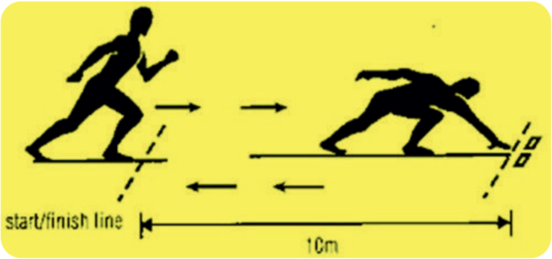
Lateral hop: Have the students move sideways along the ladder, stepping with one foot in each square, using either one foot or both feet at the same time.

High Knees: Students lift their knees up high as they move along the ladder, stepping slowly and then quickly from one square to the next.

Shuttle Run: Shuttle run involves running quickly between two points, improving speed and fitness at any level of difficulty.

Basic Shuttle Run Drill

- Set up markers such as cones about 10 metres apart.
- Sprint from one marker to the other and back, that is 1 repetition.
- Do 6 repetitions as fast as possible.
- Time the result for the entire 6 repetitions.
- Rest for 5 minutes.
- Repeat the drill.



Power: Power is the body's capacity to produce force rapidly. It is vital for explosive activities like jumping and sprinting. Plyometric exercises are highly effective for enhancing power as they involve rapid stretching and contracting of muscles, known as the stretch-shortening cycle.

Jump Squats: Jump from a squat position to full extension, then land softly.

Box Jumps: Jump onto a sturdy box or platform and then step or jump back down.

Tuck Jumps: Jump vertically while bringing the knees up towards the chest in mid-air.

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Jumping Jacks: Jump with legs spread wide and arms raised overhead and then return to the starting position.

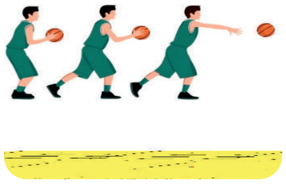
Lateral Jumps: Jump sideways over a line or a marker, land softly and immediately jump back to the opposite direction.

Ankle Hops: While bouncing up and down on the balls of the feet, maintain balance.

Standing Long Jumps: Jump forward as far as possible from a standing position, land softly and continue the same.

Medicine Ball Throw : Medicine balls, with origins dating back to ancient Greece and Persia, remain essential tools in modern athletics training. Versatile and effective, they improve power, core strength and overall athleticism. Incorporating medicine ball throws into workouts engages multiple muscle groups, mimicking explosive movements is crucial for sports performance.

Overhead Throw: Stand with the feet shoulder-width apart, holding the medicine ball with both hands overhead. Explosively throw the ball overhead as high as possible, then catch it on the rebound and repeat.



Squat Throw: Begin in a squat position, holding the medicine ball in the chest. Explosively extend the hips, knees and ankles to jump up while simultaneously throwing the ball overhead. Catch the ball and then repeat the process.

Chest Pass: Stand facing a wall or partner with the feet shoulder-width apart. Hold the medicine ball at chest level and explosively extend the arms to throw the ball forward. Catch the ball on the rebound if it's thrown against the wall, or if it's with a partner, let them catch it and then repeat the process.

Lunge Throw: Start in a split stance with one foot forward and the other foot back, holding the medicine ball at the chest. Perform a lunge while simultaneously throwing the ball forward. Then, switch legs and repeat the process.

Seated Overhead Throw: Sit on the ground with the legs extended and knees slightly bent, holding the medicine ball with both hands at the chest. Then, explosively extend the arms to throw the ball overhead as high as possible. Finally, catch the ball and repeat the movement.

Partner Chest Pass: Pair students up facing each other at a distance. One student throws the medicine ball to their partner, who catches it and then throws it back. Repeat this sequence for several repetitions.

Balance and Coordination

Balance and coordination are crucial for movement and physical performance. Balance involves staying upright or controlling body movement, while coordination is the smooth and efficient movement of multiple body parts. There are two types of balance: static and dynamic. Our eyes, ears and body senses help maintain balance. Coordination requires not just balance but also strength and agility. Practice and training in specific sports can enhance balance and coordination.

To improve these skills, try the following exercise.

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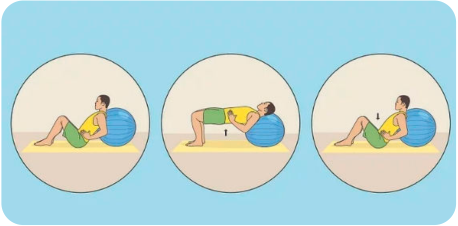
Seated Ball Balance

- Sit on the ball with the spine straight and abdomen in.
- Place the hands on the ball, behind the head (harder), or hold onto a wall for balance.
- Lift the right foot off the floor and stretch it out straight, holding it in the air for 5 or more seconds.
- Lower and repeat on the other side.

Bridge Exercises (Legs on Ball):

- Lie flat on the back near to the exercise ball
- Place the calves on top of the exercise ball.
- Raise the hip and hold the position for 3 deep breaths.
- Lower the hips back to the starting position.

Bridge Exercises (Back on Ball):



- Sit on the floor with the shoulders against the exercise ball.
- Place the hands on the sides or across the chest.
- Lift the hips so the thighs and back form a straight line and hold the position for 5 seconds.
- Drop the hips back down to the floor

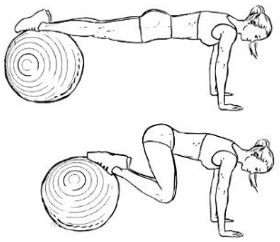
Stability Ball V-Pass

- Lie face up on the floor with the legs together and extended straight, holding a stability ball overhead with both hands.
- Brace the core, lift the arms and legs off the ground and place the ball between the feet in one motion.
- Squeeze the ball with the legs and lower the arms and legs back to the floor.
- Repeat the motion by passing the ball back to the hands.

Medicine Ball Squats:

- Place the ball between the wall and the lower back with the feet shoulder width apart and slightly outward.
- Lower the body in a squat position until thighs are parallel to the ground. Keeping the back against the ball.
- Bend the knees to 90° in line with the toes.
- Straighten the legs, keeping the weight over the heels to return to a standing position.

Knee tuck



- Take a push-up position on a stability ball.
- Keep the shins on the ball and the arms straight.
- Balance the body in this position.
- Keeping the back straight, gently tuck both knees and start to roll the ball towards the chest.
- Pause for a few seconds and return the ball to its original position.

Ball Pass:

- In pairs, have one student sit on the stability ball. While the other stands a short distance away.
- The standing student gently rolls a ball to the seated student, who catches it and rolls it back.
- This exercise challenges balance and coordination.

Coordination Drills

Agility Ladder Drills : Set up an agility ladder on the ground and guide the students to perform various footwork patterns such as high knees, lateral shuffles and crossover steps, which helps to improve foot speed, agility and coordination.

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Dribbling Drills
Use basketballs or soccer balls and set up dribbling courses with cones. Students dribble the ball throughout the course using various dribbling techniques, such as crossovers, between the legs and behind the back. This enhances ball-handling skills and coordination.

Jumping Rope
Jumping rope is a great physical education game that helps in building fine and gross motor skills, coordination and bilateral motor coordination by engaging both hand and feet muscles simultaneously

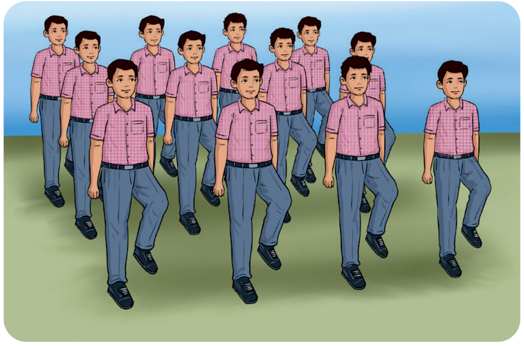
Cross Crawls
Cross crawls are effective in supporting coordination by bridging the right and left hemispheres of the brain, enhancing hand-eye coordination and cognitive activities like language learning and reading.

Coordination Drills with Legs:
Balance on the hands and knees. Raise up the left arm and right leg together and keep the balance. Then raise up the right arm and left leg.

Marching

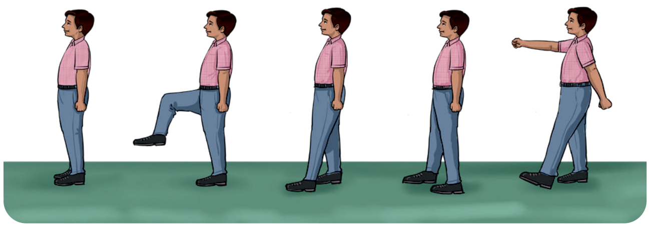
Objectives
- To develop coordination and teamwork through marching.

Mark time march



1. For command 'Mark time March' raise the left foot ½' off the ground and place it back.
2. As soon as the left foot touches the ground for the command, 'right'raise the right foot ½' off the ground and place it again.
3. The command is completed when the left foot touches the ground.
4. The right foot is raised and placed on the floor at a command interval (without any command).
5. Continue this movement in rhythm with the command left... right... left.

Halt
1. For the command class halt, the left foot lands on the ground.
2. Halting is completed with the three step rhythm check 1... 2....
3. Check is given when the right foot lands on the ground.
4. Place the left foot down (count 1) then stamp the right foot beside the left foot (count 2), to achieve the attention position in a 'V' shape.



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Quick March and Halt

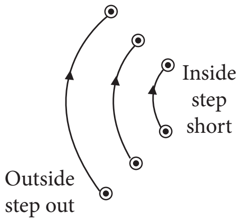
Students in each file standing at attention position. On hearing the command "Quick March," students advance by taking the left leg forward and keeping the left heel on the ground with the knee straight. Simultaneously, swing the right arm forward and the left arm backward to shoulder level. Move in file to a designated distance.

For the command, "Squad... Halt," halt with a three-step rhythm, completed when the left foot lands on the ground. The halting sequence is completed with the verbal cadence "Check... One,Two."

Marching – Change of Direction

Right Wheel

On hearing the command "Right Wheel," the right foot lands on the ground. The leading file immediately turns to the right direction and continues marching.

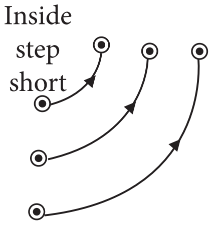


The speed of the wheel is adjusted according to the ability of the student standing on the outside of the file to maintain pace by taking longer steps.

Meanwhile, the student on the inner side of the leading file shortens their pace and waits for the outer student to join them. The rear files continue to march straight until they reach the point where the leading file turns right, after which they follow the leading file.

Left Wheel

On hearing the command "Left Wheel," the left foot lands on the ground. The leading file immediately turns to the left direction and continue marching.



The student on the inner side of the leading file takes shorter steps, while the student on the outside takes longer steps to rejoin the file.

The other files continue marching straight until they reach the point where the leading file turned left.

Class 6
Unit 2

Physical Development

Calisthenic Exercises

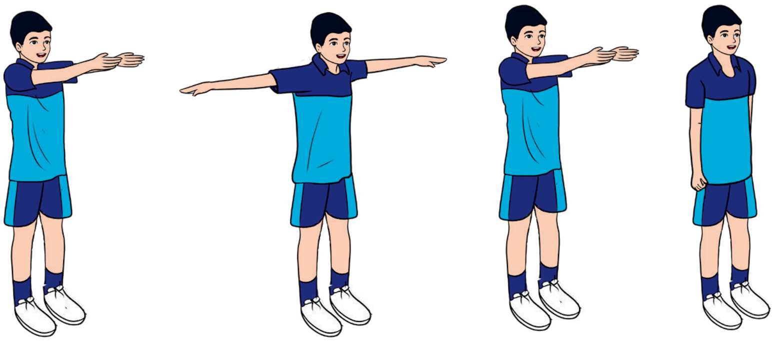
Objective

- To enhance physical development through a combination of Calisthenics and Light Apparatus Exercises.

Starting position: Stand with feet slightly apart.

Exercise – 1

1. Bring arms forward to shoulder level with palms facing each other.



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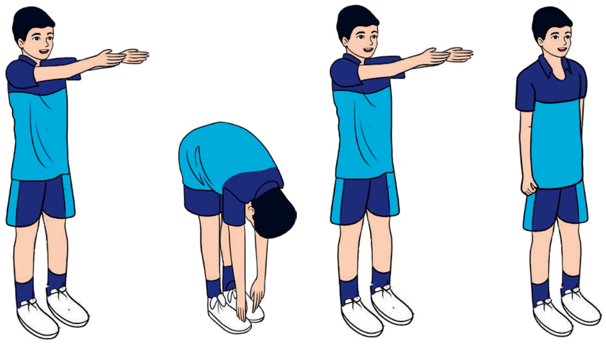
2. Move the arms sideways with palms facing downwards.
3. Same as count 1.
4. Back to the starting position.

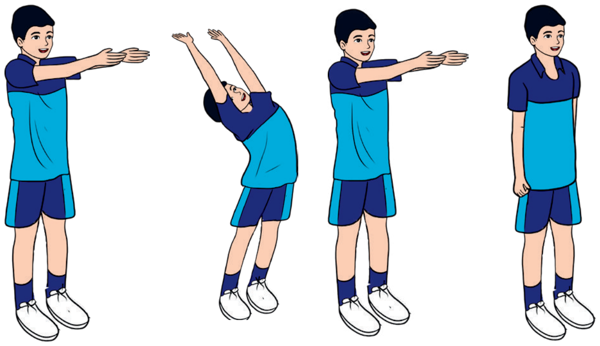
Exercise – 2

1. Bring arms forward to shoulder level with palms facing each other.
2. Bend forward and touch the toes without bending the knee.
3. Same as count 1.
4. Back to the starting position.



Exercise – 3

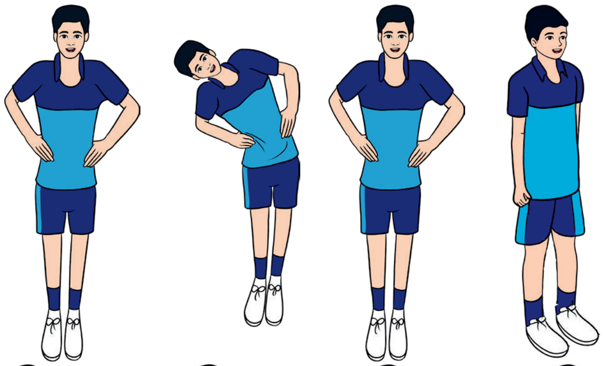
1. Bring both arms forward to shoulder level with palms facing each other.
2. Raise the arms upward, stretching the trunk backward as much as possible.
3. Same as count 1.
4. Back to the starting position.



Exercise – 4

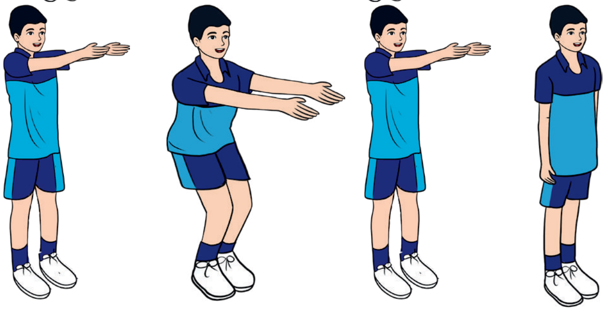
1. Place the hands on the hip.
2. Bend the trunk to the left side.
3. Same as count 1.
4. Back to the starting position.

(Repeat the same on the right side too.)



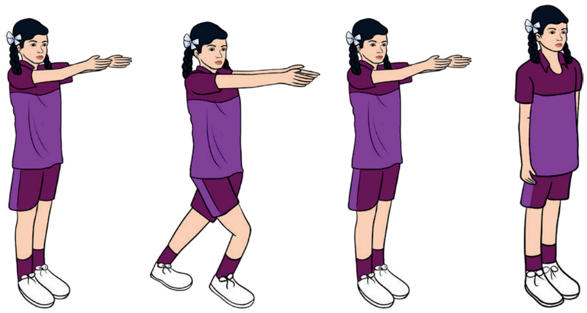
Exercise – 5

1. Bring both arms forward to shoulder level with palms facing each other.
2. Bend both knees, keeping chest up and back straight.
3. Same as count 1.
4. Back to the starting position.



Exercise – 6

1. Bring both arms forward at shoulder level, palms facing each other.
2. Bring the right leg forward, bending the knee and keeping the back straight.
3. Same as count 1.
4. Back to the starting position.



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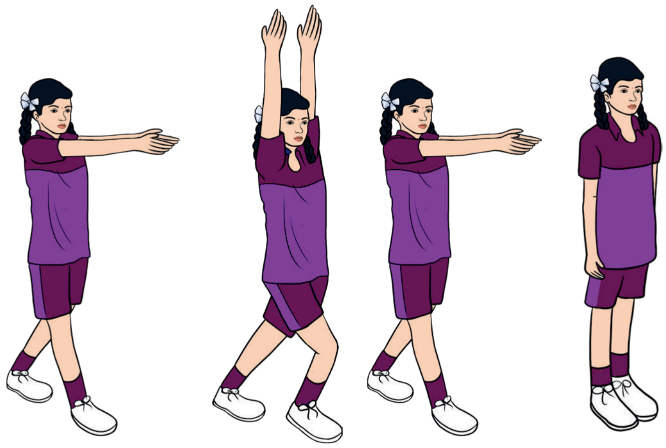
Exercise - 7

1. Bring both arms forward to shoulder level, palms facing each other and bring the right leg forward.
2. Raise the arms above the head and palms facing each other.
3. Same as count 1.
4. Back to the starting position.

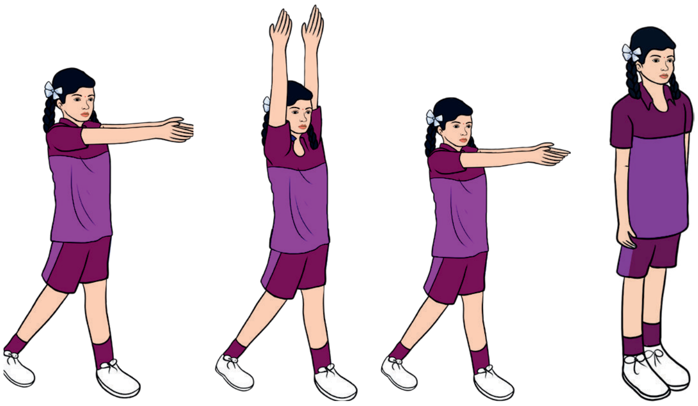
(Repeat the same for the left side too.)



Exercise - 8

1. Bring both arms forward to shoulder level and bring the right leg backward.
2. Raise the arms above the head and palms facing each other.
3. Same as count -1.
4. Back to the starting position.

(Repeat the same on the left side too.)



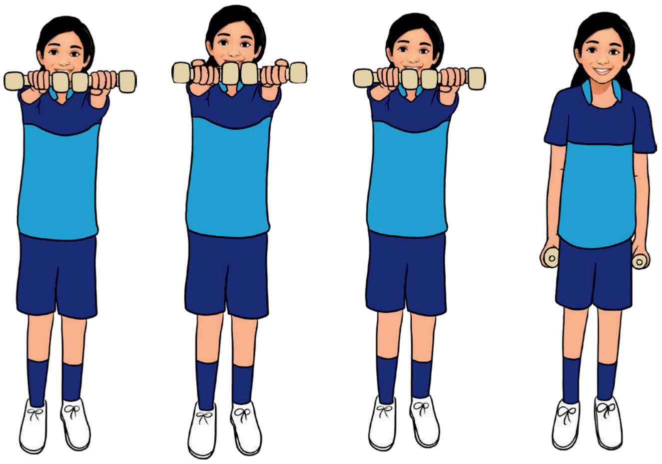
Light Apparatus Exercises

Dumb-bell Exercises

Starting position: Stand with legs slightly apart. Hold the dumb-bells in each hand and keep the hands to the side of the body.

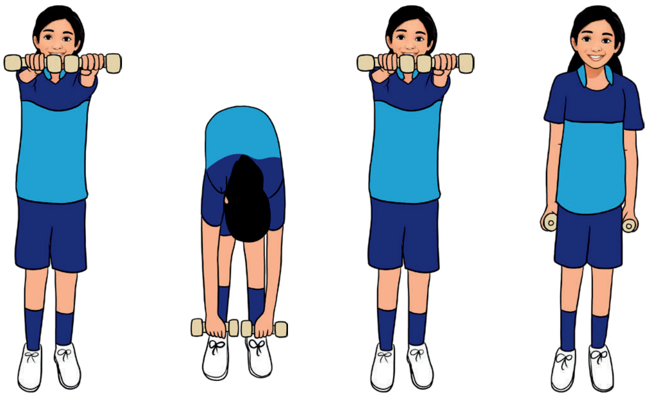
Exercise – 1

1. Bring arms forward, palms facing downward and click the dumb-bells once at shoulder level.
2. Turn palms upward and click the dumb-bells again.
3. Same as count 1.
4. Back to the starting position.



Exercise – 2

1. Bring both arms forward and click the dumb-bells at shoulder level.
2. Bend forward and click the dumb-bells in front of the feet without bending the knee.
3. Same as count 1.
4. Back to the starting position.



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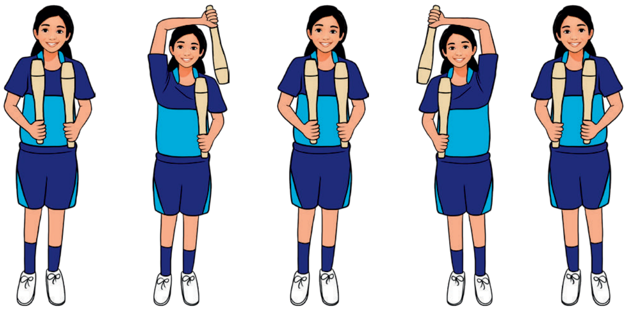
Indian Club Exercises

Starting position: Hold the Indian club in front of the chest, with elbow flexed.

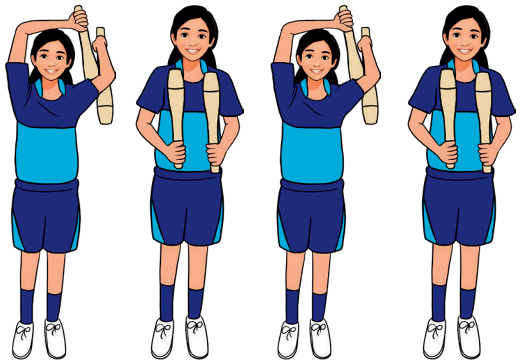
Exercise – 1



1. Rotate the right hand Indian club around the head in clockwise direction and back to its position.
2. Rotate the left hand Indian club around the head in an anticlockwise direction and back to its position.

(Repeat for 16 counts)

Exercise – 2

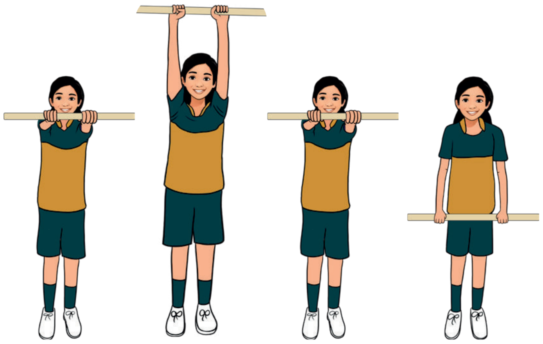


1. Swing both hands Indian club to the left making an anticlockwise circle.
2. Bring clubs back to position.
3. Swing both hands Indian club to the right making a clockwise circle.
4. Back to the starting position.

(Repeat for 16 counts)

Wands Drill

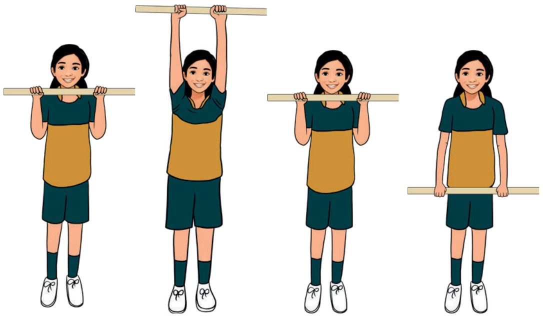
Starting position: Stand with feet slightly apart and hold the wands with both hands at shoulder width in front of the thigh.



Exercise - 1

1. Raise the wand forward without bending elbows.
2. Raise the wand upward without bending elbows.
3. Same as count 1
4. Back to the starting position.

Exercise - 2



1. Bend the elbow and bring the wand near the chin.
2. Raise the wand upward as well as the heels.
3. Same as count 1.
4. Back to the starting position.

Indigenous Exercises

Dands

Ordinary Dands

Starting position: Start in a full squat position with palms on the ground in front of the knees and bend body forward.

1. Bring the body forward and bend both elbows. Keep the body parallel to the ground and shift the body weight on the toes and palms.
2. Straighten the elbows, arch the back.
3. Same as count-2.

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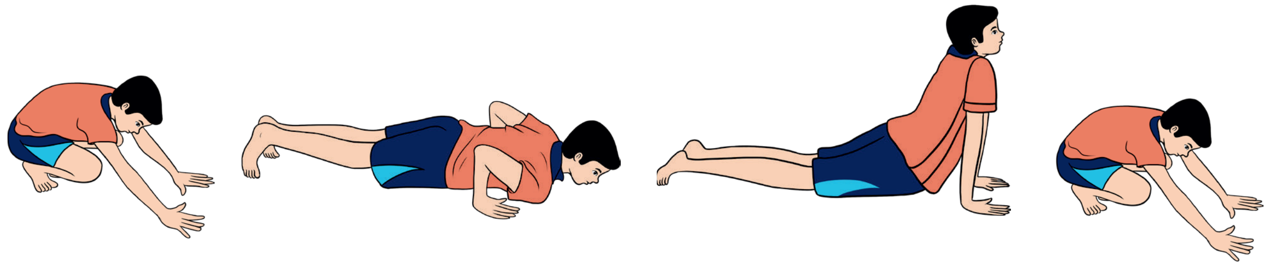
4. Same as count-1.
5. Back to the starting position.

Repeat this for a specific period of time.



Class 6 Unit 3

Sports Education

Kabaddi

Objectives

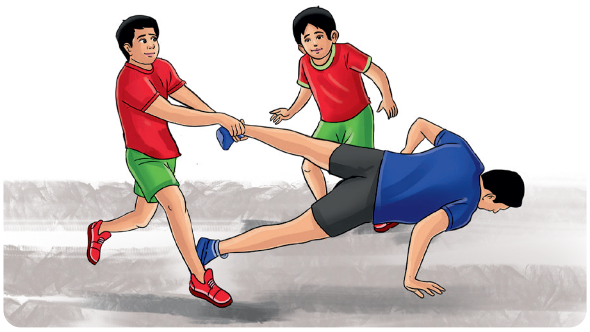
- To develop the basic skills of ankle catch, knee catch and toe touch in the game of kabaddi.

Ankle & Knee Catch

Teaching the Skill

Teaching ankle and knee catch are vital for defence play in kabaddi. Mastering this technique allows players to swiftly halt opponents, earn points and disrupt opposing teams. The teacher should teach the following fundamental skills of kabaddi.

Ankle catch



- The defender should stand in a balanced position with knees bent slightly.
- Lean the body backward and keep the hands close to the knees.
- When the rider extends his leg for a touch, the defender catches the opponent's ankle firmly using both hands.
- After the catch, pull the rider's leg towards the end line.

Knee Catch

- Stand in a balanced position with knees bent slightly.
- Lean the body backward and keep the hands close to the knees.
- When the raider keeps one leg in front during his raid, the defender firmly catches the opponent's front leg below the knee (as shown in figure) using both hands.
- After the catch, raise the raider's leg upward to imbalance the opponent.

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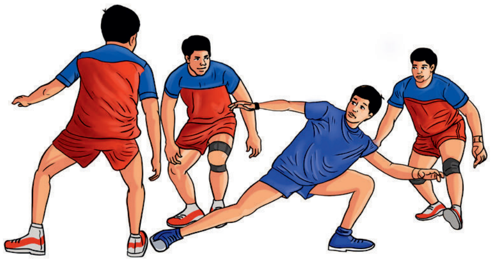
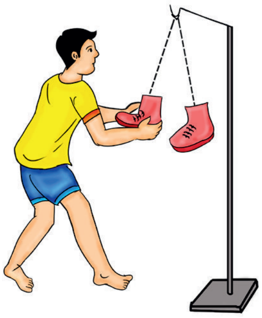
Toe Touch



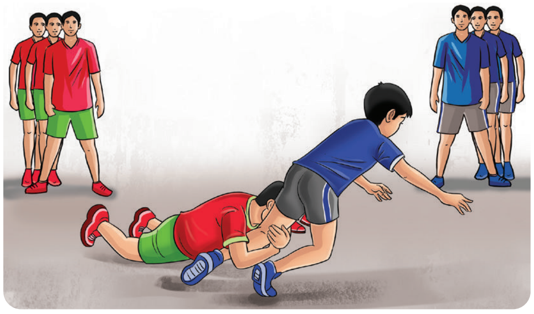
- A raider should stand in a balanced position with knees slightly bent and feet apart. This stance helps him move his legs quickly towards his opponents.
- After watching the movements of the opponents, the raider quickly extends his leg to touch the opponent's foot with his toe.
- The raider should stretch his hands a little forward to defend himself, if the opponents try to catch him.
- During this attempt, the raider's body should lean towards the midline and body weight should be shifted to the rear leg.
- As soon as he touches the anti, he quickly withdraws the leg and moves quickly toward the midline.

Practising the Skill



Instructions to practise ankle and knee catches in Kabaddi:

1. **Demonstrate Proper Technique:** Begin by demonstrating the correct form and technique for both ankle and knee catches. Show them how to position their hands, feet and body to execute each catch effectively.
2. **Break Down Each Movement:** Break down the catch into smaller, manageable steps. Focus on footwork, hand placement and timing for both ankle and knee catches. Emphasise the importance of precision and timing in executing successful catches.
3. **Ankle Catch:** Hang two shoes or rubber pieces. Students try to hold the moving objects like shoes or rubber pieces from designed hanger especially for ankle catch to improve catching accuracy. Each student has to be involved in the practice.



4. **Knee Catch:** Organise the students into two groups. Line up the two teams on the kabaddi ground. One student from each of the two teams should stand as a raider and one as a defender. When the raider steps on the baulk line, the defender should hold the knee and practise it. Then practise by changing the raider to the defender and the defender to the raider. Similarly, all students should practise this technique.

Lead-up Activity

Crossing the Baulk line

Draw a half kabaddi court with baulk line and group the students equally into two teams and name them as A and B. One team has to stand on the court and act as catchers, while the other team starts as raiders and enters the court against the catchers one by one. If the raider touches the baulk line and reaches back safely, then, they get one point. If the raider is caught by the catchers then the catchers get the point and the raider will not get any point. All the students should be given an equal number of raids one by one. After the raid of A team, the B team shall continue the raid. The team that scores maximum points is declared the winner.

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Volleyball

Objectives

- To teach and develop the fundamental skill of underarm passing in volleyball.

Underarm Pass

Teaching the Skill

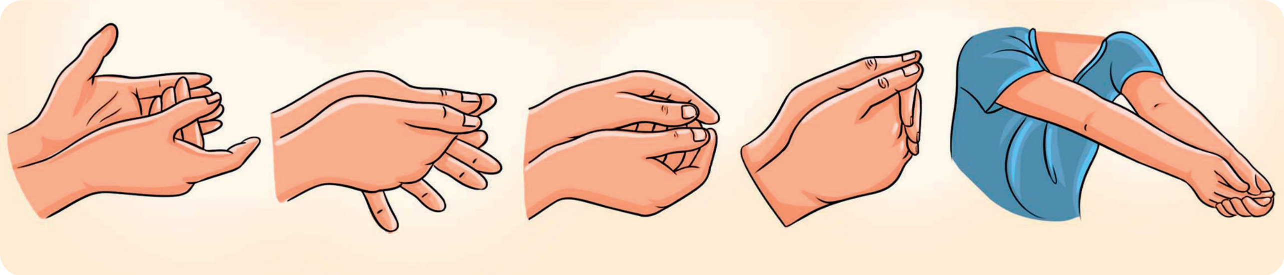
The underarm pass or forearm pass is a key skill in volleyball. It is used to receive and return the ball to the opponent efficiently. Mastering this technique requires proper footwork, body positioning and timing. It is essential for effective team play.

Teaching the underarm pass in volleyball

Footwork and Hand Position

Foot Position: Stand with the shoulder-width apart for balance. Keep the knees slightly bent to maintain a balanced position.

Hands Position: Players should place their hands together with the thumbs parallel, creating a flat platform with the forearms.

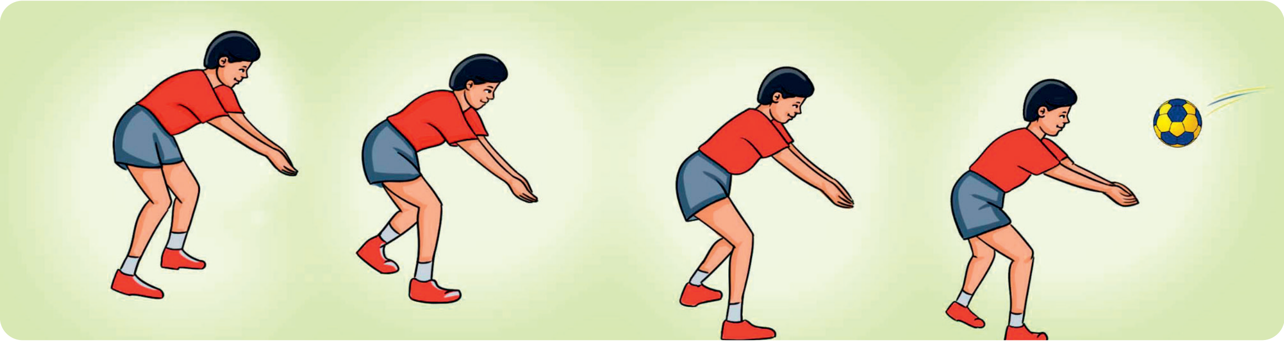


Direction: Take a position where you want to pass the ball (usually towards the target or setter).

Weight Distribution: Distribute body weight evenly between both feet. Avoid leaning too far forward or backward.

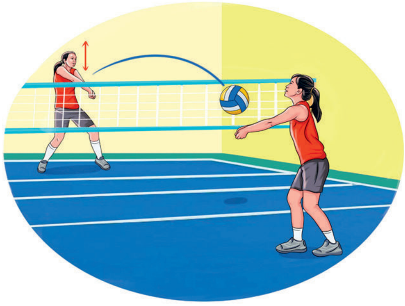
Movement: Move feet quickly to get into the desired position. React promptly to adjust stance based on the ball's trajectory.

Flexibility: Be ready to move in any direction (forward, backward or sideward) to reach the ball.



Practising the Skill

Exercise-1: Ball toss and Pass



In pairs, one player tosses the ball to the partner.

Focus on practising the underarm pass with correct hand placement. Emphasise passing the ball with a straight arm and a firm wrist.

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Exercise-2: Passing to a Target

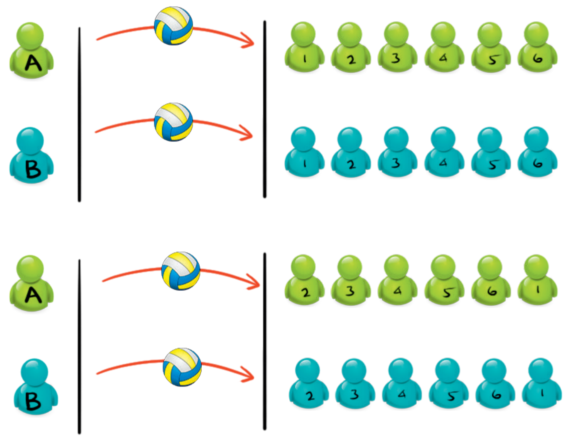
Set up cones as targets on the court. Players practise underarm passing, aiming to hit the cones. Reinforce proper hand placement during the pass.

Encourage students to practise forehand volleyball passes by having them adhere to the directions.

- In order to play volleyball properly, students need to be taught the foot position and hand position, selection of direction and quick movement.
- Make sure that the elbow does not bend when the ball falls on the hands.
- The ideal contact zone for an underarm pass is on the fore arms, specifically between the wrist and elbow.

Lead-up Activity

Lead-up Activity: Ball Pass Relay



Organise the students into two groups and name them A and B. Line up teams A and B as illustrated in the figure. Select a leader from each team to stand as shown in the figure, ready to pass the ball to their teammates. When the teacher blows the whistle, the team captains should pass the ball to their teammates. After the pass, he moves back to join his line. Award one point for each correctly passed ball to the captain; no points are awarded for missed passes. Continue the activity for a specific period of time. The team with the highest score at the end of the activity will be declared the winner.

Football

Objectives

- To develop the passing skill in the game of football.

Passing Skill

Teaching the Skills

Passing skills are crucial in football for maintaining possession, creating scoring opportunities and executing team strategies effectively. Short passes are used to pass the ball to a nearby teammate using the inside of the foot. Short passes are essential for maintaining possession, building up play. Long passes are used to quickly switch the play or pass over longer distances. Players typically use the instep of the foot to strike the ball with power and accuracy.

Passing with the Right leg

- Place the ball to the side of the right leg or position to keep the ball at the side as shown in the figure.

- Approach the ball and place the non kicking leg in line with the ball.
- Swing the kicking leg back to make contact with the centre of the ball through an instep kick.

Types of Pass

Inside of the Foot

- The inside of the foot pass or push pass is the most accurate pass to play over a short distance.

Outside of the Foot

- The outside of the foot pass is generally used to cover short distances.

Instep Drive

- The instep drive is used to cover long distances.

Chip Pass

- The chip or lofted pass is played into the air. It can be used to cover short or long distances.

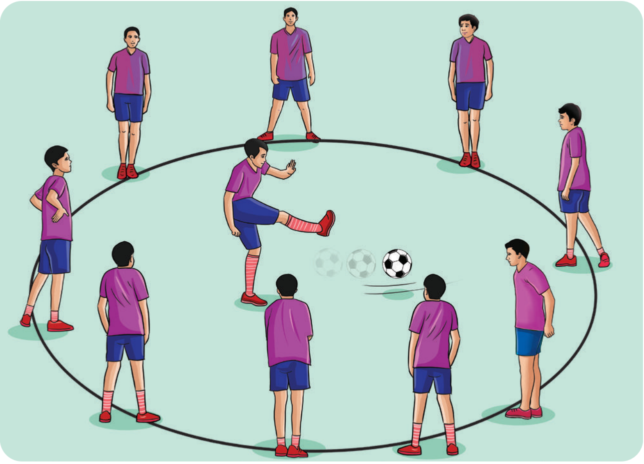
Dribbling

Dribbling is an important skill in football. Skilled dribblers can navigate through tight spaces, twist away from defenders and maintain possession even when closely marked. It helps the player to keep possession of the ball while moving. It is important to dribble fast and to have the ball in control.

Practising the Skill

Exercise 1: Circle Pass

Draw a circle of 10 m diameter. Make the players stand evenly around the circle. One player has to stand in the centre with the ball.



Training Procedure

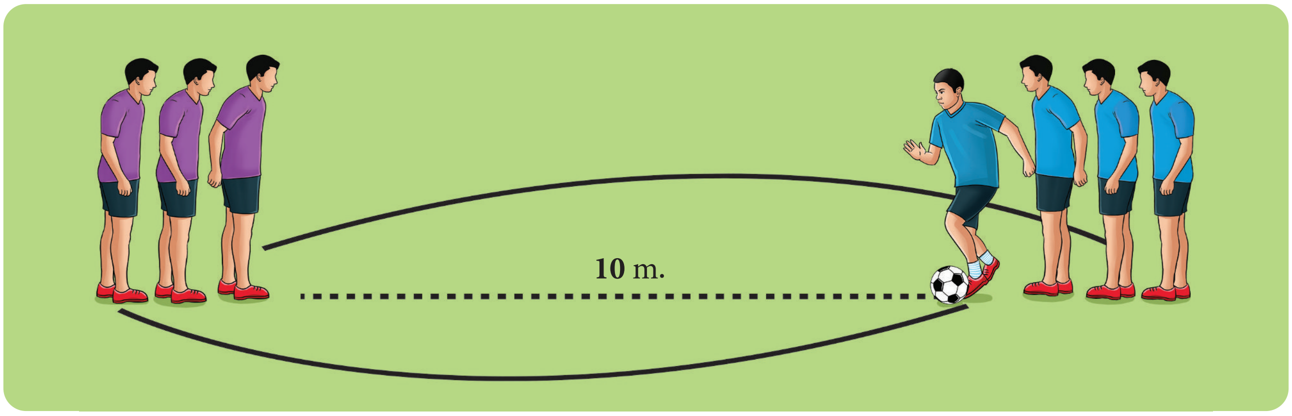
The centre player passes the ball to all the players, who stand around the circle one by one. The player who stands around the circle should return the pass to the centre player.

The centre player then passes to the next player in the circle, either to the left or right in order. After completing the pass to all the players in the circle, the centre player joins the circle and another player becomes the centre player.

Likewise, continue the passing until every one occupies the centre position. Continue this pattern of passing to encourage quick and accurate passes. Opportunity should be given to all students to practise the skill.

Activity 2 : Pass and Move in Opposite Direction

Group the students into two. Groups should take a position 10m away facing each other.



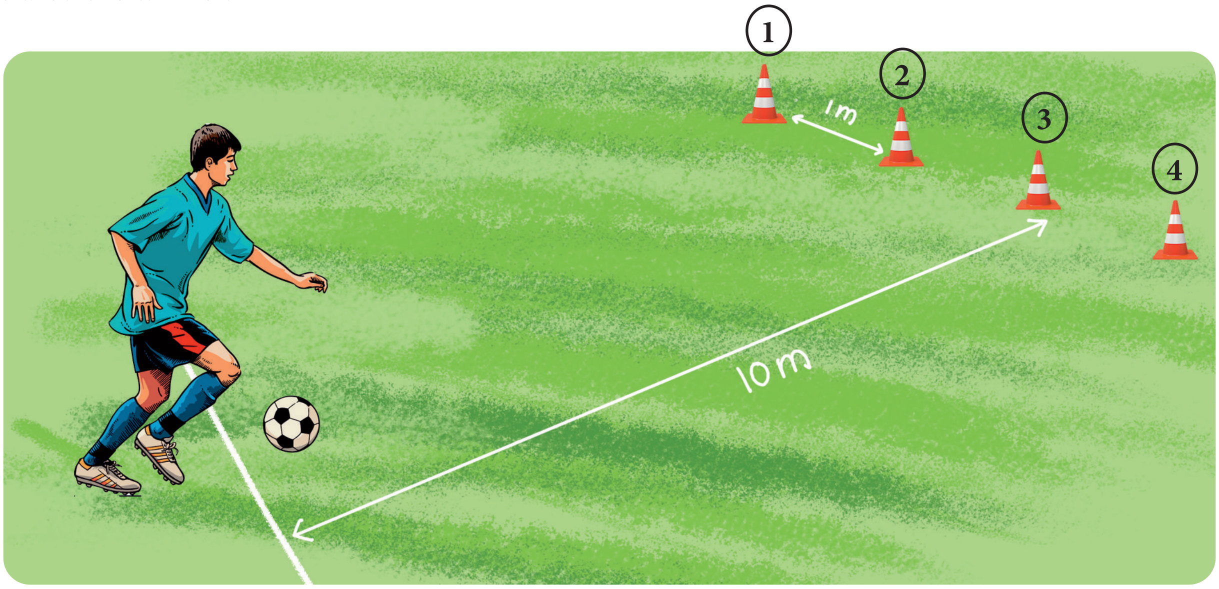
The first player with the ball passes the ball to the opposite side, runs and joins the opposite side. The player receiving the ball has to pass the ball to the player on the opposite side and runs to join the opposite side. Likewise, all the players have to continue the same. Continue this pattern of pass and run to ensure that the players move after the pass, in order to create a dynamic flow of passing movement.

Lead-up Activity

Passing Accuracy

Equipment - Footballs, Cones

Group the students into two equal teams and name them as A and B. Draw a 10m line and place four cones on one side and starting point on the other side. Place four cones 1 meter from each other side by side. Make A team to stand behind the starting point. Each student will be given three chances to pass the ball. There are two scoring systems. 3 points for ball crossing through 2nd and 3rd cone, 5 points for ball crossing through 1st and 2nd and 3rd and 4th cones. After completion of A team, B team continues the ball passing like A team. Calculate the team score by adding the individual score of each player of the team. The team that secures more than the other team will be declared the winner.



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Carrom

Objective

- To teach students in setting up the Carrom board, arranging carrommen and mastering basic grips to play Carrom effectively.

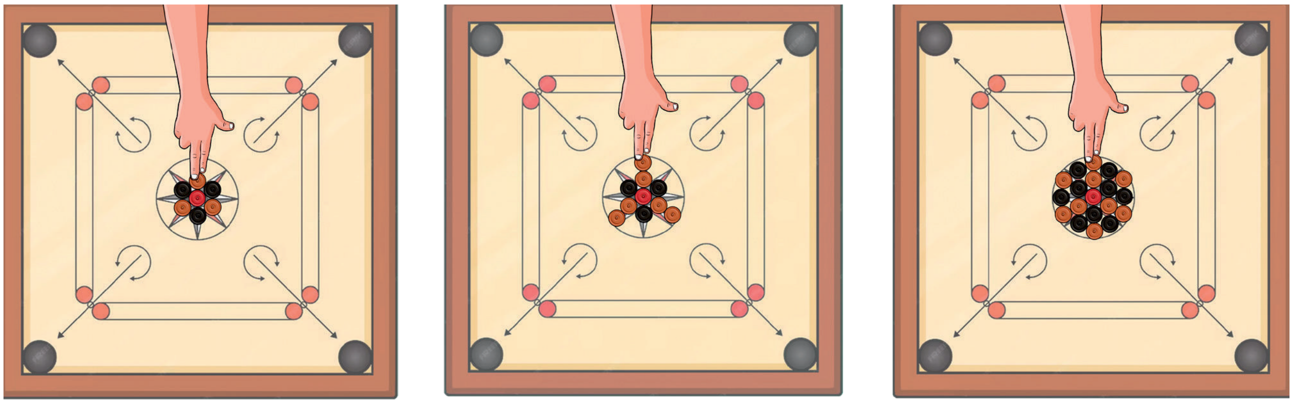
Teaching the Skill

Carrom

Carrom is a popular tabletop game that requires skill, strategy and precision. Before diving into gameplay, it's essential to understand the basics of setting up the carrom board, arranging the pieces and mastering basic grips.

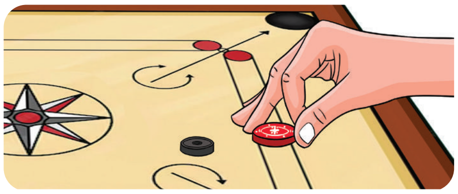
Method of arranging carrommen in the carrom board

The carrommen are arranged in centre circle of the board in the following way,



- The Queen shall occupy the Centre Circle and the rest of the carrommen are placed around the Queen in the first row keeping the Black and White Carrommen alternately.
- In the second row, three white Carrommen will form the shape "Y," with the white Carrommen in the first row.
- The remaining space is filled up by placing black and white Carrommen alternately. All carrommen so arranged, should be in a compact round.

Straight Grip



The straight grip is used commonly.

Place the thumb and middle finger on either side of the striker and the index finger on the back of the striker.

Grip Alignment

Emphasise the importance of aligning the grip with the direction of the shot. For a straight shot, the grip should be aligned with the target.

Finger Placement

Ensure that the thumb and middle finger are evenly spaced and applying equal pressure, with the index finger providing support.

Simple shot:

- It is the most common shot in carrom.
- The coin is in front of the baseline.
- Place a striker on a baseline so that carromman and pocket are in a straight line.
- Hit the coin with striker to pocket.

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Practising the skill

Practice-1: Shadow practice

Without using the striker, practise moving the finger smoothly along the board. Focus on keeping the motion straight and consistent.

Practice-2: Practise with Striker

Place the striker on the board and practise hitting it with the finger. Start with gentle strokes and gradually increase the force.

Practice-3: Aim and Strike

Set up a target coin and practise hitting it with the striker. Concentrate on maintaining a straight line between the finger, the striker and the target.

Repeat the practice regularly. Consistency will help to develop muscle memory and accuracy over time.

Lead up Activity

Group the students into two teams and name them A and B. Team-A members shall be given 2 chances to do a simple shot one by one placing carrommen in two different positions. The scoring for a Simple Shot is as follows. If the student pockets the coin with the Striker, one point will be awarded. If the student does not pocket the coin with the Striker, no point is given. The team which scores the maximum number of points is the winner of the game.

Silambam

Objectives

- To develop the basic footwork patterns of Silambam balance, movement and executing the techniques.

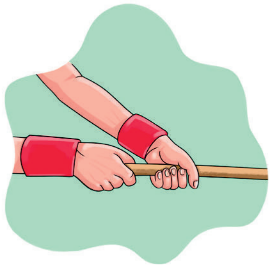
Balance, Movement and Yeru Varisai Execution

Teaching the Skill

Silambam is not only a martial art of Tamils but also a traditional heroic sport of Tamils. Silambam is also known as Kambu sutruthal. It is a martial art that consists of many elements such as stick handling, footwork and bodywork.

Method of grasping Silambam stick

Leave a gap of half a foot at the tip of the heaviest part of the stick. First, hold the stick in the right hand and then hold it in the left hand around the stick.

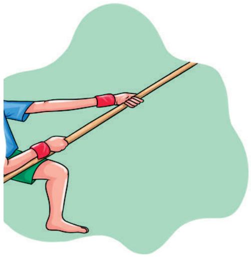


There are two types of grips in Silambam

1. Two hand close grip
2. Two hand wide grip

Kaaladi :

Kaaladi is the foundational footwork pattern in Silambam, essential for beginners to master. It involves learning precise movements that sync with the stick's motions. In Silambam, kaaladi is the key to deriving power for attacks.



The Single Step Pattern: (also known as Ondi Adi or Yeru Varisai) is a fundamental footwork technique. It forms the basis for movement and positioning during Silambam practise and combat.

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Yeru Varisai Stance

- Feet shoulder-width apart.
- Knees slightly bent.
- Stick held firmly with the proper grip.

Yeru Varisai Movement

- In the Single Step Pattern, take a single step forward or backward.
- Focus on maintaining balance and stability.
- Keep the stick ready for strikes or blocks.

Yeru Varisai Execution:

To move forward

- Shift the weight to the front foot.
- Take a controlled step forward.
- Maintain the stance and stick position.

To move backward

- Shift weight to the back foot. Take a step backward while maintaining balance.

Practising the Skill

Practise the student in yeru varisai and eranku varisai without stick 20 steps up and 20 steps down.

Let the students do the above activity with stick.

Lead-up Activity

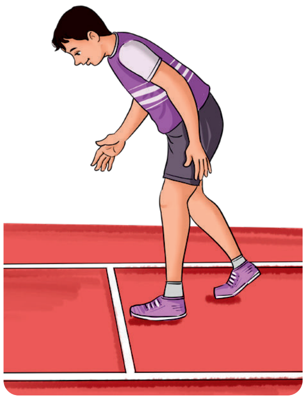
Organise the students into two or three groups. Ask the students to perform **yeru varisai and eranku varisai** one by one. Points should be awarded to players who do it right. Similarly, the team that gets the maximum points will be declared the winner.

Running - Starting Technique

Objectives

- To teach young athletes the proper technique of the standing start, enabling them to effectively initiate races in middle and long distance races.

Standing Start



The standing start is typically employed in middle and long distance running events, particularly those spanning 600 metres or more, such as the 800 meter, 1500 meter, 3000 meter, 5000 meter and 10000 meter races.

Teaching the fundamental skill

Teach students the proper technique for the standing start through clear and concise instructions, along with practical demonstrations.

Before the command "go"

Place the front foot near the starting line

Demonstrate to the students the appropriate distance from the starting line for placing their front foot.

Position the back foot shoulder-width apart from the front foot

Explain the importance of proper foot positioning for balance and power. Demonstrate the correct distance between the front and back foot.

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Shift the body weight onto the front foot

Guide students to transfer their weight forward onto the front foot while keeping the back foot grounded. Emphasise the need to maintain stability and readiness for the start.

Align the arm on the opposite side of the front leg forward, keeping the other arm at the back. Illustrate how to position the arms for optimal balance and coordination. Emphasise the importance of symmetry and alignment in arm placement.

Upon hearing "go"

Push off from the front leg: Instruct students to push off forcefully from the front foot while maintaining balance and control. Demonstrate the explosive movement needed to initiate the start.

Drive through with the arms: Encourage students to drive their arms forward and back in a coordinated motion to generate momentum. Stress the importance of arm drive in propelling the body forward.

Bring the back leg forward to initiate the run: Guide students to a smooth transition from the starting position by bringing the back leg forward to initiate the run. Demonstrate the fluid motion of bringing the back leg into alignment with the front leg for efficient movement. Throughout the instruction, provide verbal cues, visual demonstrations and corrective feedback to ensure that students understand and execute each step correctly.

Practising the Skill

Practising the fundamental skill

The teacher can provide the following instructions to the students for improving their standing start technique.

1. **Emphasise Patience:** Remind students to wait for the "go!" command before starting.
2. **Demonstrate Balance:** Show students how to maintain balance by keeping their weight and body stable.
3. **Strong Foot Placement:** Explain the importance of positioning the strong foot close to the starting line for a powerful push-off.
4. **Second Foot Placement:** Instruct students to position their second foot one feet behind the first foot to prepare for the start.
5. **Opposite Arm and Leg:** Encourage students to start with the opposite arm and leg forward to promote balance and coordination.
6. **Foot Positioning:** Guide students to place their feet approximately one foot apart to maintain stability and leverage.
7. **Starting Line Placement:** Ensure students understand the need to place their foot behind the starting line to avoid disqualification. Encourage students to engage in repeated drills and exercises focused on the standing start. By providing clear instructions and ample opportunities for practice, students can effectively correct mistakes and enhance their standing start proficiency.

Lead-up Activity

30 meter running relay

Group students into two equal groups and name them as A and B. Set the distance between the starting line and finishing line to 30 metres. Upon command, the first student from each group runs to the finishing line and returns to the starting line. After completing the distance, the student touches the next student in line, who then starts running. This process continues until all students in each group have completed the entire distance. The group that finishes the distance first will be declared the winner.

Sail Technique in Long Jump

Objectives

- To develop the students ability to demonstrate proper execution of the sail technique in long jump, achieving increased distance and improved control during the flight phase.

Teaching the fundamental skill

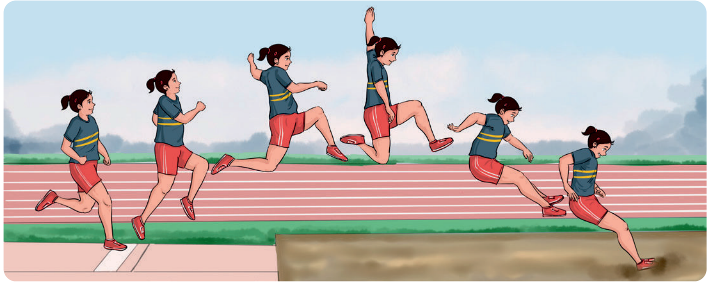
Approach: At the beginning of the approach, the athlete should drive forward, much like in a sprint, maintaining a slight body lean, keeping the head down, driving the knees high and utilising powerful arm movements, all while ensuring quick and powerful foot push-off.

The athlete should gradually transit to an upright sprinting position, maintaining quick and springy steps to accelerate at high speed.

Take-off:

The penultimate step should be a slightly longer, flat-footed step that brings the centre of gravity a little lower. The plant step should be short and quick, hitting flat-footed, slightly ahead of the body. The swing leg drives up, heel to butt, knee lifting to a 90-degree angle. The active arm drive, in correlation with the knee drive, helps generate lift and block forward rotation.

Flying – Sail Technique



The free leg is held in the take-off position. The trunk remains upright and vertical. The take-off leg trails during most of the flight. The take-off leg is bent and drawn forward and upward near the end of the flight. Both legs are extended forward for landing.

Landing:

- Extending the legs maximises stride length and power output.
- Bending the trunk forward aids in maintaining balance and forward momentum.
- Drawing the arms backward helps in generating momentum and propelling the body forward.
- Pushing the hips forward directs the energy towards the touchdown point, optimising running efficiency.

Practising the Skill

First, teach the students about the approach run in the long jump. Stand, by leaning the body slightly forward, head facing down and with high knee action. Start running with powerful arm movements and gradually switch to fast running. Identify the student's strong leg and train them to jump with the toes of that leg. Keep the upper body straight and vertical while placing the strong leg for the take-off. Lift the strong leg off the ground and jump forward. In the flying stage, as the body rises forward from the ground, bring the strong leg parallel to the other leg extended forward. Practise jumping forward and landing with both legs together.

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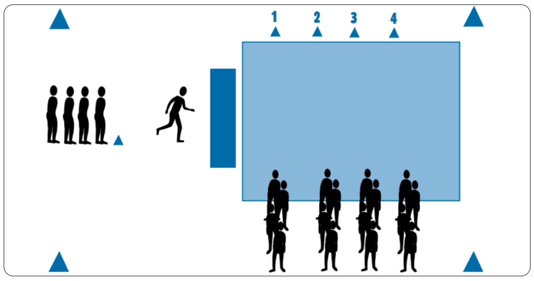
Lead-up Activity

Long Jump Challenge Game



Place coloured cones evenly along the sandpit's edge for clear visibility. Organise the players into teams or individuals, positioning them on the runway for long jump. Keep the first cone at a distance of 3 metres and the other cones at a distance of 20 centimetres each. Assign points to each marker, starting from 1 and increase progressively. Allow players to take turns on long jumps and aim for proximity to the markers for points. Calculate team scores by adding individual scores or individual score to decide the winner and they should be appreciated by others.

Hang Style Technique in Long Jump

Objectives

- To teach and train the hang style technique in long jump.

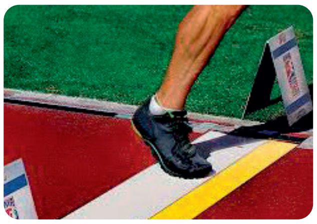
Teaching the Skill

The hang style is one of the prominent techniques used in long jump. It involves extending both arms and legs to create a longer, more aero-dynamic body position during flight, which helps to maximise the distance jumped. This technique is particularly useful for jumpers who want to improve their form and efficiency in the air.

Approach

The approach in long jump involves the athlete accelerating to maximum speed of about 30-45 meters before the take-off board. The jumper maintains an erect body position to transfer horizontal velocity into vertical by hitting the dominant leg on the take-off board. The final strides involve sinking and raising the hips to ensure a smooth transition into the jump without losing speed.

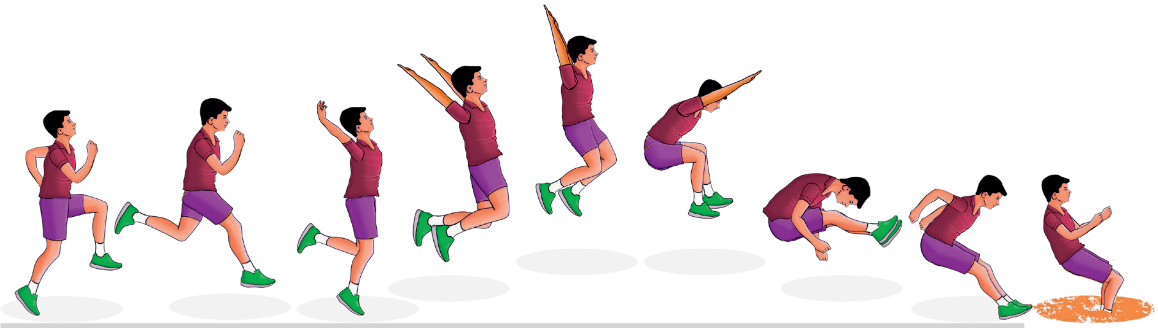
Take-off



The take-off in long jump is a critical phase where the athlete transitions from the approach run to the flight phase. The take-off foot is the one that strikes the take-off board. Right-handed jumpers typically use their left foot for take-off.

The effectiveness of the take-off directly influences the overall success of the jump, making it essential for the athletes to master this technique.

Flight



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- The hang style is one of the techniques used during the flight phase. After take-off, the athlete stretches their body to make it as long as possible by extending both arms and legs.
- The hang style allows the jumper to maintain forward momentum and prepare for an efficient landing without significant loss of distance.

Landing

The landing phase is essential for optimising jump distance and achieving a smooth finish. After extending their body during flight, the athlete positions their legs forward in preparation for landing. The objective is to land with both feet in the pit while maintaining maximum forward momentum and avoiding excessive upper body rotation, which could diminish the distance.

Practising the skill

Approach

- Practise the approach run, gradually increasing the number of strides from 12 to 20-22 strides.
- Focus on developing a good running rhythm and achieving maximum speed by the time of take-off.
- Ensure accuracy in hitting the take-off board by practising the approach run.

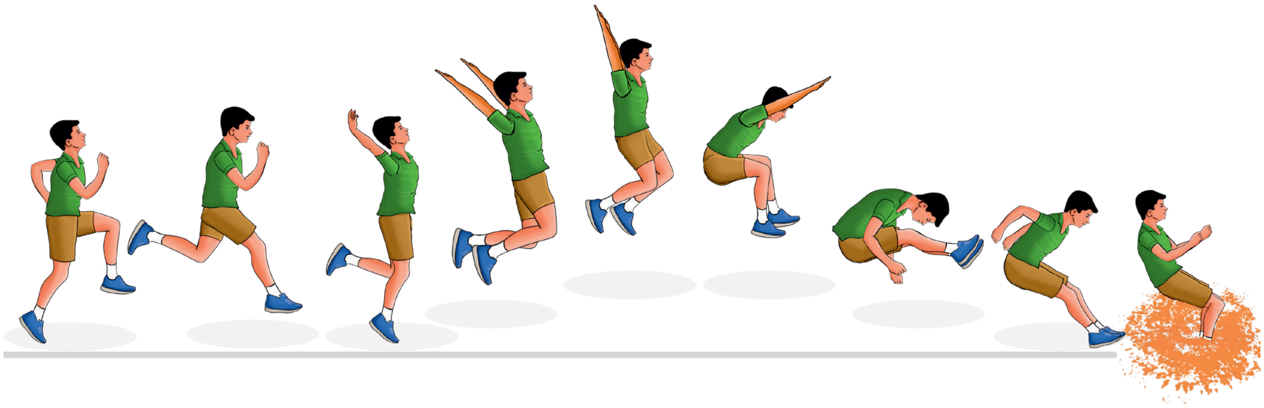
Last Two Strides

- Practice the penultimate stride being longer than the final stride.
- Lower the centre of gravity in the penultimate stride to prepare for take-off.
- Raise the centre of gravity in the final stride, making the last stride shorter, to get into the take-off position.

Take-Off

- Practise making the penultimate stride longer than the final stride.
- Maintain a proper body position, keeping the hips slightly forward of the shoulders at the take-off.
- Generate vertical impulse by accelerating the free limbs (arms and non-take-off leg) against the braced take-off leg.

Flight (Hang)



- In the air, extend both arms and legs to reach maximum distance from the hips.
- Hold the maximum extended hang position until reaching the apex of the jump.
- Snap the legs forward into the landing position after the apex.

Landing

- Practise landing with the legs separated and knees bent to absorb the impact.
- Lean the body forward on landing.

Leaving the long jump pit

- Leave the long jump pit moving forward and exit the pit.
- Avoid keeping the hands behind the landing mark.

The key to practise each phase is focussing on proper technique, to develop a consistent and effective hang style long jump. Gradually increase the speed and the number of approach strides as the athlete masters each component.

Lead up Activity

Team Long Jump Competition

Organise the participants into teams, with each team consisting of four members. Each team member completes their jump in sequence, with the next jumper starting their run-up as soon as the previous jumper completes their jump. Measure the distance of each jump and record it for scoring purposes. The overall score of each team is determined by the combined distances of all four jumps. The team with the longest combined distance in the overall jump is declared the winner.

Shot Put

Objectives

- To develop the glide action of the leg and seamlessly integrate it with the overall shot put technique.

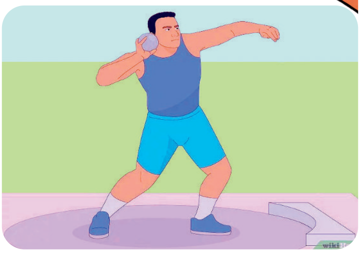
Linear Technique

Teaching the Fundamental Skill

Holding the Shot Put:

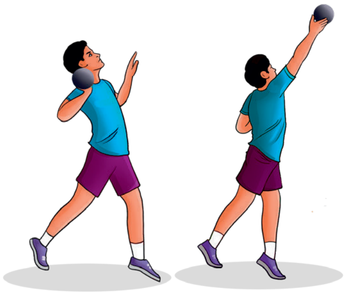
- Hold the shot at the base of fingers, not in the palm.
- Slightly spread fingers apart with the thumb for support.
- Keep the hand bent back in the cocked position when holding the shot.

Placement of the Shot:



- Raise the shot above the head.
- Lower it straight down until it is under the jaw.
- Push the shot into the neck.
- Lift the elbow parallel to the floor. (avoid squeezing it towards the back).
- Ensure that the thumb points down towards the clavicle.
- Ensure the palm faces the throwing direction.

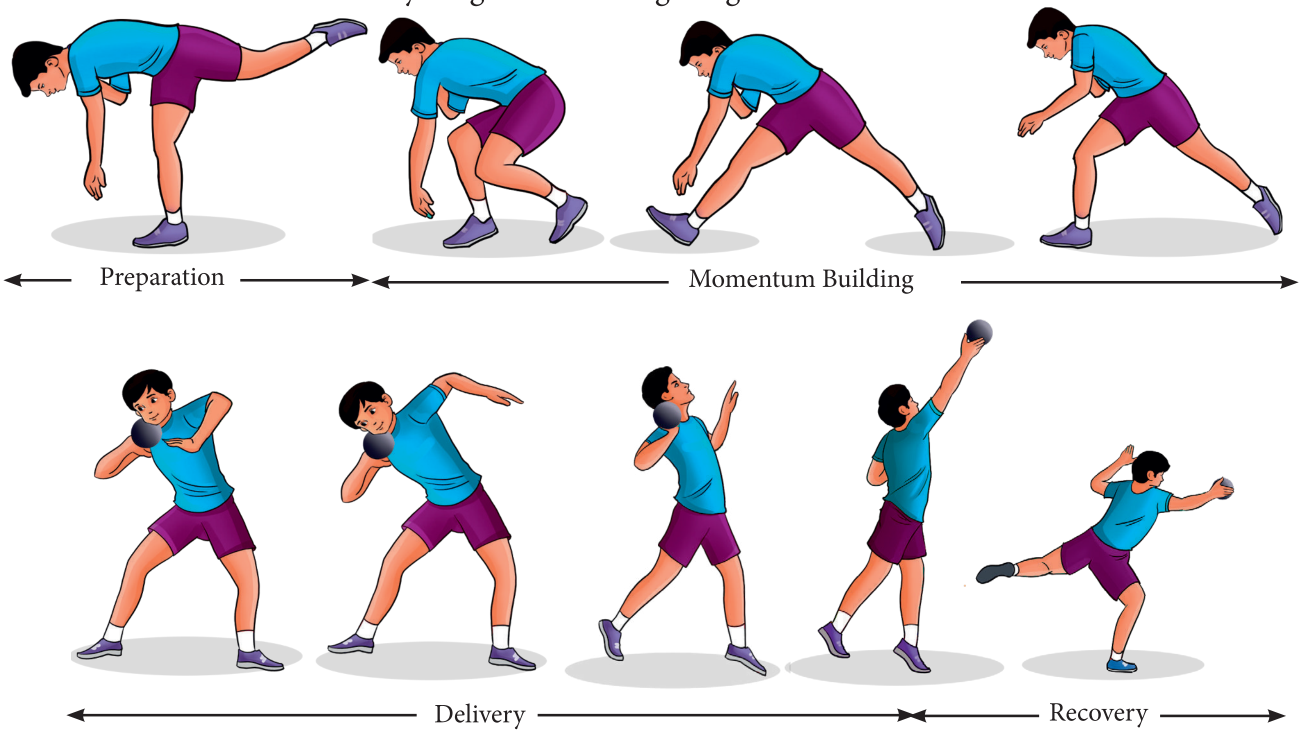
Delivery of the Shot Put:



- Keep eyes to the ceiling.
- Punch the shot away from the neck.
- Maintain a high elbow throughout.
- Finish the punch with a flip of the wrist.
- To prevent the body from moving forward keep the left leg firmly on the floor.
- Keep the left arm tucked close to the side of the body.

Body Position in the Glide:

- Stand at the back of the ring facing away from the throwing direction.
- Place the shot against the neck.
- Extend the left arm out in a relaxed manner.
- Extend the left leg back towards the toe board.
- Ensure that most of the body weight is on the right leg.



Practising the Skill

Wrist Flips:

Stand facing the sector with the shot held above the head in the throwing hand and quickly flip it out using the wrist.

Two-Arm Putts:

Stand facing the sector, hold the shot in both hands in a chest pass position with hands behind the shot and thumbs down and push it out with both hands while keeping elbows high.

Arm Strike:

Stand tall facing the throwing direction, look up to the ceiling, push the shot away from the neck to drive through towards the throwing area and flip the wrist at the end of the motion.

Bent Knee:

Face the throwing direction with bent knees, look up to the ceiling and push the shot away from the neck while focussing on driving through towards the throwing area, simultaneously pushing up with the legs and extending the hips out.

Lead-up Activity

Shuttle Method Throw

Students are grouped equally into two teams A and B. The team A stand behind the starting line one behind the other. The first students from team A puts the shot and then the second student puts the shot from the landing point of the first student. Likewise all students from team A should continue. After team A completes, team B students should start at the starting point and continue the activity. The team that achieves the greatest overall distance will be declared the winner.

Class 6
Unit 4

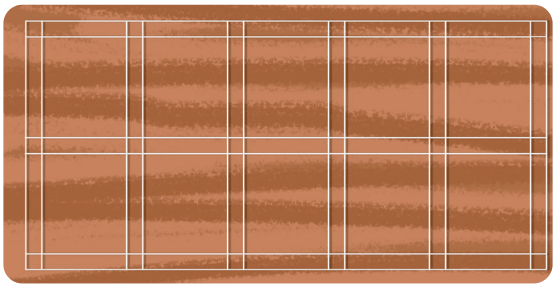
Tamil Folk Games and Joyful Games

Objective

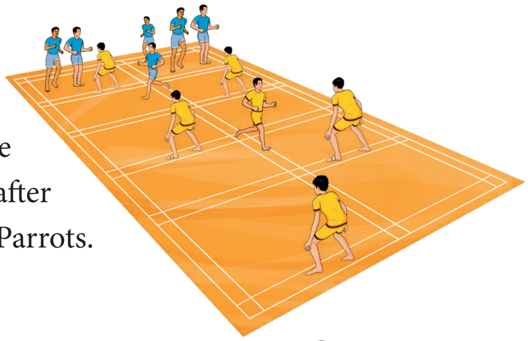
- To ensure students' happiness through Tamil Folk Games and Joyful Games.

Tamil Folk Games

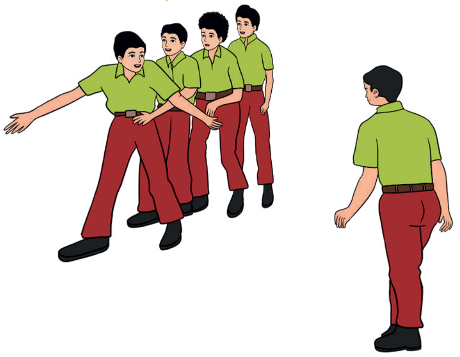
Kili Thattu



Group the students into two groups with equal number of Parrots and Pods. Draw the pitch as shown in the picture. Pods are intruders and Parrots are blockers. Barrier Parrots can move laterally in a horizontal line, while the Head Parrot can move horizontally and vertically in all lines. After the teacher blows the whistle, the Pods try to enter the grid. Barrier Parrots prevent Pods from progressing. If caught, Pods will lose. If Pods enter the grid from the starting line, escape from the Parrots and if they touch the boundary line, the Pods become Fruits and score a point. Roles are reversed after 9 minutes, the Parrots become Pods and the Pods become Parrots. At the end, the opponents congratulate the winning team.



Pakkuvettiyai Kanomae!



Organise the students into two or more groups based on the number of students. Select a leader and a common student as 'IT' (Finder of Pakkuvetti) for each group. The group lines up behind their leader, ensuring that each student holds the waist of the student before him. On an instruction by the teacher, the 'IT' attempts to touch the last student in the group. The leader of the team endeavours to prevent the 'IT' from touching the last student. The last student of the team moves zigzag and tries to escape himself from being touched. If the student is touched, he/she becomes the **'IT'.** They interchange their positions and the game continues. While chasing and touching (The finder of pakkuvetti) 'IT' sings **"PAKKU VETTIYAI KANOMAE"** the team sings **"THEDI ODI PIDITHUKKOL".** Thus, the game continues for a specific period of time.

Therai thavalai ottam

Draw straight lanes with 15 m length and 1 m width. The starting line and finishing line are also marked. Organise the students into different groups based on the number of lanes. Ask the students to line up near the starting line. Make them sit with both hands in front like a toad and jump towards the finishing line. Winners are identified from each race. The winners of each group may be given the chance to participate in the final run. The top three winners should be applauded and cheered by all the other students.

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Sundu muthu

Students are grouped into pairs and they play against each other. The order of play is determined by tossing a coin. Equal numbers of tamarind seeds are to be given to both students. At the start of the game, if any seed moves while drawing a line, then that seed will be awarded to the opponent and the first player looses his chance. If the seed doesn't move (while drawing a line) then the first player continues the game by striking each tamarind seed (one seed against another), randomly. After each successful strike, the struck tamarind seed will be awarded to the first player. In such a way, the game continues until all the seeds are struck successfully by the first player, then the opponent starts the game.

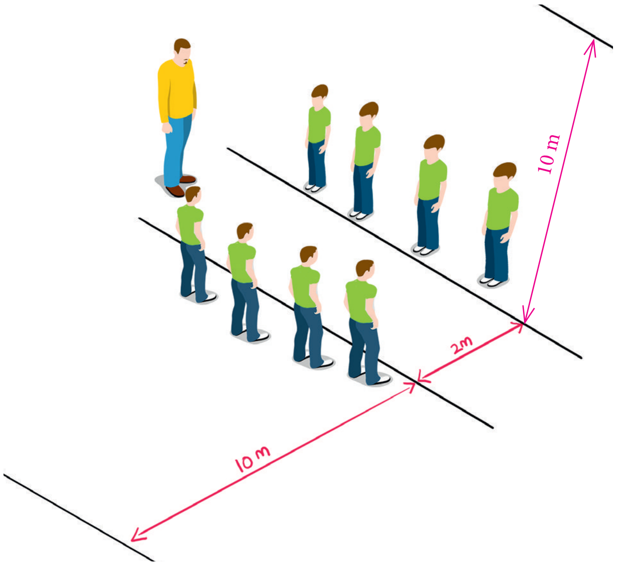
Rule 1: While striking seeds, if the seeds doesn't hit each other. Then both seeds (striking seed and aimed seed) are given to the opponent.

Rule 2: While striking, if the striking seed hits the other seed (other than the aimed seed), then all the remaining seeds will be awarded to the opponent. Now, the opponent continues the game with the remaining seeds.

Joyful Games

CAP... CAT.....

Group the students into two teams, CAP and CAT, with equal members. Draw two lines 2 metres apart with a boundary line 10 metres from each team's starting point. The teacher stands between the lines and says 'Ca.... p' or 'Ca....t' without completing the word. When the teacher says the whole word 'Cap', the Cap team chases the Cat team. Cat teammates must run to their boundary line without getting caught. Captured Cat team members join the Cap team. Repeat the game, switching the words 'Cap' and 'Cat'. The team with the maximum number of students at the end wins.



Farmer and Crow Shuttle Run

Students are grouped into two and each group is further divided into two groups as crows and farmers. Draw two boundary lines 10 metres apart with four small circles equally spaced between them. The

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farmer's team line up on one boundary line, crows on the opposite boundary line. Give four cones to the first farmer. When the game starts, the farmer places one cone in each circle, then joins behind the crow's line. Next, the first crow hops and picks up the cones in each circle and gives it back to the next farmer in the opposite row and joins the farmer's team. The game continues with each player taking turns. The game ends when the first student returns to his / her initial position. The group that completes first is the winner.

All Change

Students form a large circle with their hands spread out to create a big circle on the ground. Outside the big circle, draw smaller circles, one less than the total number of students. Select one student as "IT", who stands in the centre of the big circle. Other students stand individually in the smaller circles. When the teacher blows the whistle, the game starts. The student selected as "IT" loudly declares, \ "All Change!" On hearing this, students in the small circles must swiftly run to occupy the small circles. This movement should be quick but safe. Simultaneously, "IT" also joins the scramble, trying to occupy one of the small circles. The cycle continues until every student has been relocated to a different circle. At the end of each round, the student left without a circle becomes the new "IT" and stands in the centre of the big circle. The game repeats with the new "IT" initiating the next round.

Obstacle Relay

Between the starting line and the end line place a series of obstacles in the path of each team. At the signal of the teacher, the first student of each team runs through the obstacles to the end line, by jumping, stepping, crawling pass the obstacles in his path and returning through the obstacles again and touching the next student in line, who repeats. The team finishing first wins.

Gidi Gidi Relay

Students are divided into groups of two to four and are lined up behind the starting line. A stick of one-metre height should be planted at a distance of five metres in front of each group.

On hearing the teacher's whistle, the first student in each group runs towards their designated stick, places both hands on the top of it and rests their forehead over their hands. They then proceed to run around the stick five times without lifting their forehead. After completing the task, the student rushes back to the starting line and tags the second student in their team, signalling them to start their turn. The team that finishes first is declared the winner and receives congratulations from the other teams.

Tunnel Relay

Organise the students into groups of two to four. Draw a starting line and a boundary line at 15-metre intervals. Place cones directly across each row on the boundary lines. All students, except the first student in each group, stand behind the starting line in a row with their feet apart. At the teacher's command, the first student in each group runs to the boundary line, circles around the cones, crawls between the legs of the students at the starting line and stands behind the last student. Then next student in the line continues. The team that finishes first is declared the winner.

Shadow Tag

A circle is drawn and students are positioned within its limits. One student is designated as the "hitter." Upon the teacher's whistle, the hitter aims to touch the shadows of the running students with their foot. Any student, thus, touched assumes the role of the hitter and continues the game. This game is ideally played when shadows are well-defined on the ground.

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Class 6
Unit 5

Sports Tournaments and Schemes

Objective

- To understand the school level intramural and extramural tournaments to the students.

Intramural: "Intramural" refers to activities held within an institution's premises. Therefore, intramural competitions take place within the confines of the institution.

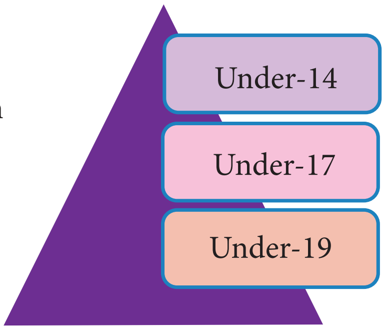
Aim of intramurals:

- Identifying students' talents and providing opportunities for all students to participate in sports competitions.
- Teaching students the fundamental rules and regulations of games.
- Embracing the motto of intramural competitions "Mass Participation."

Feasibility for organizing intramurals: When organizing intramurals, considerations should include the availability of manpower, resources, finances and time.

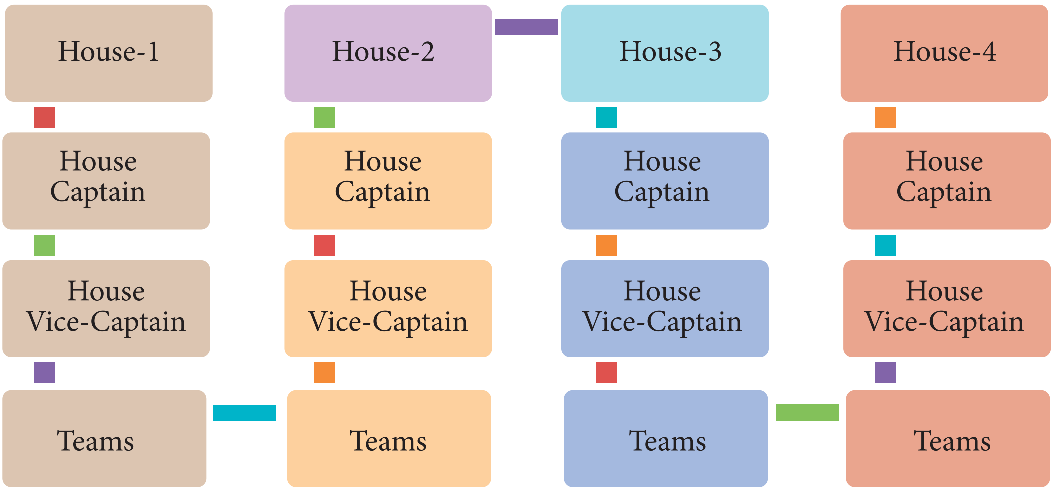
Selection of Category:

- Students should be selected for intramural competitions based on their age.
- Common age categories used are under 14, under 17 and under 19.

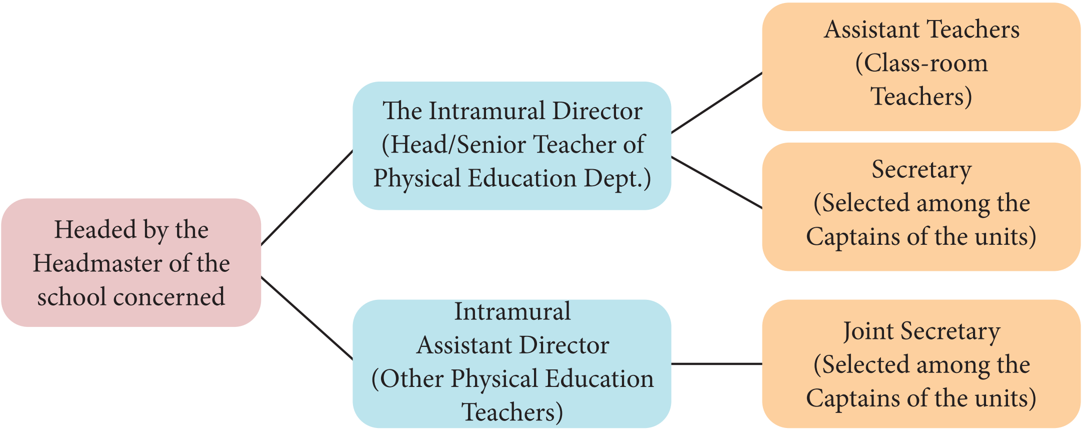


Selection of Houses and Captains

- The units must be of equal strength.
- The captains will be from the players for a particular game.



Intramural Committee/Council



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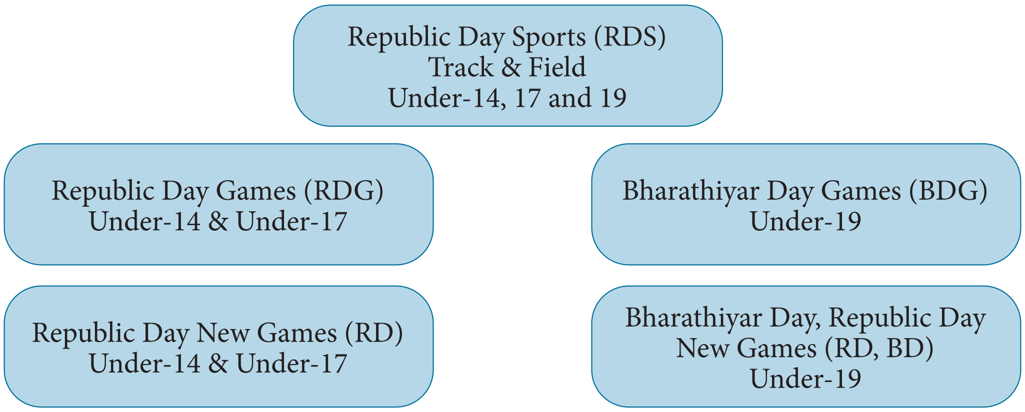
- To make and keep the committee responsible to frame rules and regulations, record for the competition.
- Ensure winner trophy for all categories are given to the winners.
- Display the names of the winning house, individual Annual Athletic Champion, School Championship along with the record breaking performances on the Honor Board.

Classification of Competitions

Extramural Competitions

Extramural competitions are Inter-Institutional competitions that provide opportunities for highly talented players to exhibit their skills outside their school in various institutions.



Talent Identification

"Catch them young" is the guiding principle for developing talent and nurturing sportspersons at the grassroots level.

The aim of talent identification

The aim of talent identification is to identify children with innate physical abilities and create a strong foundation for the future of sports and physical education. It fosters the growth of young athletes capable of competing on a global stage.

World Beaters Talent Spotting Scheme (WBTSS)

The World Beaters Talent Spotting Scheme (WBTSS) is a systematic and structured approach to identify and nurture young, talented children in the field of sports.The battery of tests is designed to evaluate essential physical attributes such as speed, endurance, agility, coordination, strength and flexibility. The battery of tests includes the following assessments to gauge motor abilities:

S. No.	Test Items	Fitness Components
1.	50m Run	Speed
2.	600m Run for girls / 800m Run for Boys	Endurance
3.	Shot put (Boys - 4 Kg Girls - 3 Kg)	Strength
4.	Standing board Long Jump	Explosive Power
5.	6 x 10m Shuttle Run	Agility

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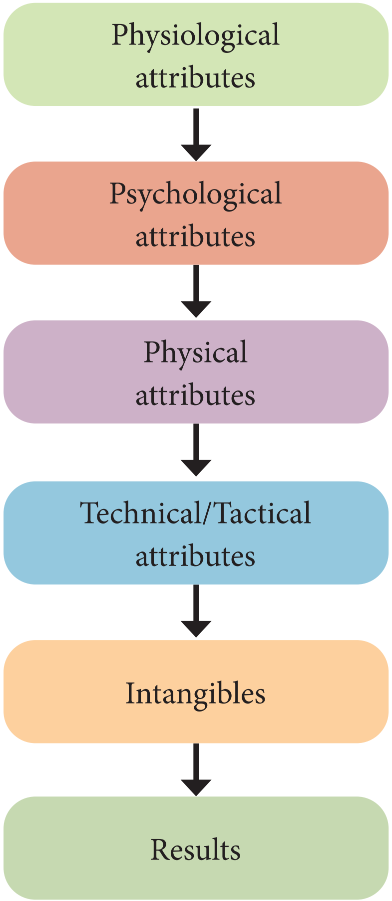
Talent Identification Steps

1. Talent Detection: This step involves discovering potential performers who are not currently involved in the sport.
2. Talent Identification: Recognizing participants with the potential to become elite performers in the future, often at an earlier age.
3. Talent Development: Providing athletes with a suitable learning environment to accelerate or realise their potential.
4. Talent Selection: The ongoing process of identifying individuals at various stages of development who demonstrate prerequisite performance levels.



Importance of Talent Identification

1. Discovery of Hidden Talent: Talent identification helps in recognizing hidden talent, which can lead to the development of exceptional athletes.
2. Early Recognition: Recognizing talent at an early stage allows children to showcase their skills at their extreme, fostering a strong foundation for future success.
3. National Asset: Talent identification helps in finding significant assets for the country, as exceptional athletes can contribute to national pride and achievements.

Components of Talent identification

Sports Schools/Hostels

The Government of Tamil Nadu, through the Sports Development Authority of Tamil Nadu (SDAT), has established 27 sports hostels across 23 districts to offer specialised coaching to students, particularly those from rural and semi-urban areas. These hostels provide scientific sports coaching, boarding, lodging and other necessary facilities, allowing students to continue their education in nearby schools.

Sports Hostels – For Boys

S.No.	District	Name of the Sports
1	Coimbatore	Athletics, Basketball, Volleyball, Gymnastics
2	Cuddalore	Athletics, Badminton, Taekwondo
3	Krishnagiri	Athletics, Football, Handball, Taekwondo
4	Madurai	Athletics, Football , Hockey, Basketball, Volleyball, Table Tennis
5	NLC Neyveli	Athletics, Football, Basketball
6	The nilagiris	Athletics, Football
7	Ramanathapuram	Athletics, Hockey
8	Sivagangai	Athletics, Football

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9	Thanjavur	Athletics, Basketball, Volleyball
10	Thoothukudi	Athletics, Football, Hockey, Basketball, Squash
11	Trichy	Athletics, Football, Hockey, Volleyball, Boxing, Swimming
12	Tirunelveli	Athletics, Football, Hockey, Basketball, Volleyball, Tennis, Swimming
13	JNS Chennai	Athletics, Basketball, Volleyball, Boxing, Judo
14	Ariyalur	Hockey, Handball
15	Theni	Basketball, Kabaddi
16	Vilupuram	Handball, Kabaddi

Sports Hostels – For Girls

S.No.	District	Name of the Sports
1	Dindigul	Athletics, Football, Basketball
2	Erode	Athletics, Football, Volleyball, Swimming
3	Nagercoil	Athletics, Volleyball, Swimming
4	Perambalur	Athletics, Taekwondo
5	Pudukkottai	Athletics, Hockey
6	Namakkal	Athletics, Football, Kabaddi, Table Tennis
7	Tiruvannamalai	Athletics, Hockey, Basketball, Handball
8	Vellore	Hockey, Handball, Kabaddi
9	Dharmapuri	Kabaddi, Badminton, Volleyball
10	JNS Chennai	Volleyball, Table Tennis, Boxing, Judo
11	Theni	Volleyball

Aim of Sports Schools/Hostels

Sports Hostels aim to provide comprehensive training programs designed for the overall development of young athletes, focusing on nurturing and enhancing their talents.

Selection Trials for Sports Schools/Hostels

- Students are admitted in grades VII, VIII, IX and XI every year.
- Selection is based on physical abilities related to preferred games and sports.
- Selection trials are conducted in two phases. District Level Selection Trials and State Level Selection Trials.

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Sports Hostels of Excellence

- Sports Hostels of Excellence are run by SDAT for outstanding boys and girls students.
- Four such hostels have been established to offer scientific and technology-based sports coaching in selective sports and games.
- They focus on identifying potential talents and cultivating them to achieve national and international recognition.
- Athletes are admitted into various disciplines each year through state-level selection trials.

Class 6
Unit 6

Asanas and Breathing Techniques

Asanas

Objectives

- To enhance physical development, flexibility and mental relaxation through Asanas and Breathing techniques.

Trikonasana

'Trikona' means triangle. Tri means three and 'kona' means an angle. This asana resembles a triangle made of the trunk, arms and legs. Hence, it is called Trikonasana.

Procedure:

Stand with feet apart at a distance of 3 feet. Inhale slowly and raise both arms sideways up to shoulder level. Turn the right foot towards the right side. Exhale and slowly bend to the right side and place the right hand just behind the right foot. The left arm should be straight in line with the right arm. Turn the left palm forward. Turn the head and gaze at the tip of the left middle finger. Remain in the posture for 10-30 seconds with normal breathing. Inhale and slowly come up. Repeat the same procedure to the left side.

Benefits:

- Prevents the flat foot.
- Strengthens calf, thigh and waist muscles.
- Makes the spine flexible and improves lung capacity.

Padmasana

Padmasana is made of two words: padma and asana. Padma means 'lotus'. The legs in the sitting position of this asana give the appearance of a lotus. This is a meditative asana.

Starting position: Long sitting.

Method:

1. Slowly fold the right leg and place the right foot on the left thigh close to the pelvic bone. The right heel should be pressed against the lower part of the abdomen.
2. Slowly and carefully fold the left leg and place it on the right thigh. The left heel should press the lower part of abdomen.

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3. Keep the hands in jnana mudra on knees. (For jnana mudra, fold index finger and join the tips of the thumb and index finger. Keep other fingers straight.)
4. Keep the body straight and maintain the position.
5. **Releasing position:** Remove left leg from the thigh and then remove right leg and come to the starting position.

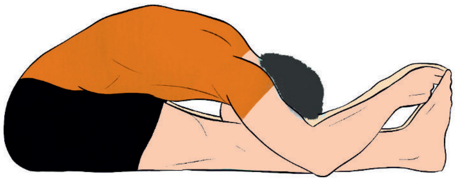
Paschimottanasana

Paschimottanasana means 'posterior' and uttana means 'stretch-up'. In this posture, the posterior muscles of the body get stretched. Hence, it is called Pashchimottasana.

Posture : Seated forward bend pose.
Position : Long sitting

Method:

1. Bend the elbows. Make hooks with the index fingers.
2. Bend the body forward and catch hold of the toes with the hooks of the fingers.
3. Place the head between the arms.
4. Keeping a little bend in the elbows and without bending the knees, try to touch the forehead with the knees. Maintain the position for 20-25 seconds.
5. Raise the head slowly.
6. Release the hold of the toes and keep the body erect.
7. Place the hands on the respective sides of the body.
8. Sit with the legs extended together.

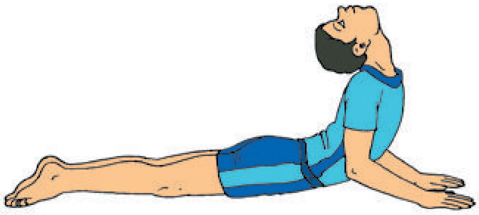


Benefits

- It helps to improve the flexibility of the spinal and abdominal muscles.
- It helps to improve the blood circulation in organs situated in the abdominal region.
- It removes constipation and dyspepsia.

Bhujangasanam

Posture : Cobra pose
Position : Prone lying position



Procedure:

1. Lie on the back and stretch the legs together. The palms should be placed close to the chest.
2. The head, neck and back should be raised slowly and look up.
3. Abdomen should be pressed to the floor.
4. Stay in this position for a few seconds and then return to the first position.
5. Inhale while raising the body and exhale while lowering.

Benefits:

- Abdominal pain and indigestion will be relieved.
- Cure diabetes.
- The mid-spine flexes and becomes flexible.

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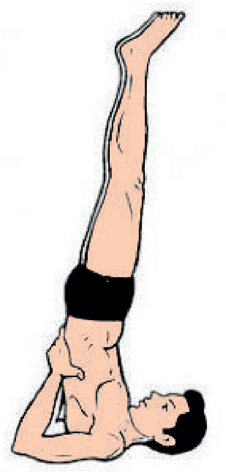
Sarvangasana

Posture : Shoulder Stand
Position : Supine position



Procedure:

1. Lie down with the legs extended and the hands close to the body by the sides.
2. Lift both legs together and stand on the shoulder.
3. The back should be supported by the hand.
4. The chin should be pressed on the chest.
5. After staying in this position for some time, lower the legs and return to the starting position.

Benefits:

- The heart will be strengthened.
- Eliminates diabetes, constipation, indigestion.

Breathing Techniques

Humming Bee Breathing

- Sit in a meditational pose.
- Inhale deeply through the nose.
- Place the index fingers on the ears and gently close the ear canals without applying too much pressure. Without touching the upper teeth and lower teeth, they produce a humming sound "mmm" like a bee. Let the sound be continuous and resonant.Continue to hum and feel the vibrations and soothing sensation in the head and face.
- After the exhalation is complete, take the fingers from the ears and take a normal breath through the nose - (This is one round).
- Repeat this process for 5-10 rounds.

Victorious Breathing

- Sit in a comfortable position.
- Close the eyes and relax.
- Breathe in slowly through the nose and slightly tighten the back of the throat. Notice the gentle sound that the breath produces.
- Continue inhaling until the lungs are completely filled.
- Pause briefly at the end of the inhalation and slowly exhale through the nose.
- Release all the air until the lungs are empty and maintain this breathing pattern.

Equal Breathing

Equal breathing, also known as square breathing or box breathing. It is a simple breathing technique that involves inhaling, holding the breath, exhaling and holding the breath again for equal durations. It can help calm the mind, reduce stress and promote relaxation

1. Inhale deeply through nose for 4 counts.

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2. Hold breath for 4 counts.
3. Exhale slowly through mouth for 4 counts.
4. Hold breath again for 4 counts.
5. Repeat this pattern for a few minutes, aiming for equal counts.

Deep Breathing

Deep breathing also known as diaphragmatic breathing or belly breathing. It is a technique that focuses on breathing deeply into the lungs to promote relaxation and reduce stress.

1. Place hands on abdomen.
2. Breathe in deeply through nose, expanding abdomen.
3. Exhale through the mouth to contract the abdomen.
4. Keep breathing deeply, focusing on each inhale and exhale.

Class 6
Unit 7

Sports Injuries, First Aid and Safety Education

Objectives

- To develop the knowledge of sports injuries among students.
- To train students to practise first aid.

Minor Injuries

Introduction

Sports injuries and safety education is essential for students as it empowers them to recognise risks and implement preventive measures, including proper techniques, warm-up exercises and equipment use, thereby reducing the likelihood of accidents. By understanding the consequences of injuries, students have become more aware of safety protocols, leading to a decrease in reckless behaviour during sports activities. Moreover, education on injury response equips students with vital first aid skills, enabling them to provide immediate assistance and prevent further harm. Additionally, emphasising the importance of rest, nutrition and rehabilitation fosters long-term physical health and prevents chronic issues. Furthermore, teaching students how to cope with setbacks and injuries which cultivates resilience and a positive mindset, enabling them to overcome challenges and emerge stronger.

Minor Injuries

Introduction: Minor injuries in sports are common occurrences that sports person often encounter during training or competition. These injuries, though less severe than major ones, can still cause discomfort and hinder performance.

Abrasion: An abrasion injury in sports occurs when the skin is scraped or rubbed against a rough surface, causing damage to the outer layer of skin.

Symptoms: Pain, bleeding and skin irritation.

Causes: Falls, collisions, contact with rough surfaces during activities like running or cycling.

Treatment: Proper wound care, clean the area and cover with sterile dressing.

Laceration: A laceration injury in sports occurs when the skin is cut or torn, often by sharp objects or contact with rough surfaces.

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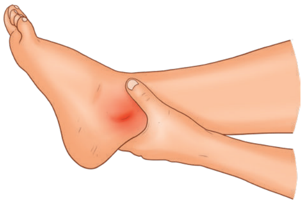
Symptoms: Lacerations can result in bleeding and pain.

Causes: They are common in sports like football, hockey and rugby where players come into contact with other players' equipment.

Treatment: These injuries can range from minor cuts to deeper wounds requiring medical attention.

Sprain: A sprain is a common sports injury where the ligaments tear.

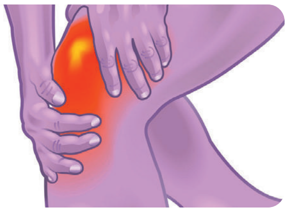


Causes: It typically happens when a joint is forced beyond its normal range of motion.

Symptoms: Pain, swelling, bruising and difficulty in moving the affected joint.

Treatment: Rest, Ice, Compression and Elevation (RICE) along with pain relievers and rehabilitation exercises.

Strain: A strain injury in sports occurs when muscles or tendons are overstretched and due to playing more time.



Causes: Muscle or tendons torn due to excessive force or repetitive movements.

Symptoms: Pain, swelling and limited mobility.

Treatment: Rest, Ice, Compression, Elevation (RICE)

Warning signs and symptoms of heat fatigue:

- Fatigue or weakness
- Excessive sweating
- Dizziness or light headedness
- Nausea or vomiting,
- Muscle cramps
- Headache
- Rapid heartbeat
- Hot and dry skin.

Heat Strokes

Heat Strokes occur during sports when the body overheats due to prolonged exposure to high temperatures and physical exertion.

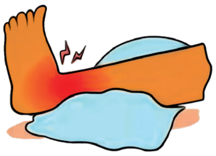
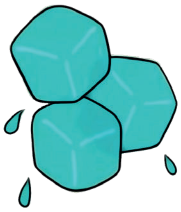
Causes: It happens when the body's temperature regulation system fails, causing body temperature to rise to dangerous levels.

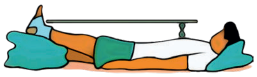
Symptoms: include confusion, dizziness, nausea and hot, dry skin. Immediate medical attention is required to prevent serious complications such as organ damage.

Preventive Measures: Stay hydrated, take breaks in the shade and wear appropriate clothing.

First Aid

Meaning: First aid is the process of carrying out the essential emergency treatment of an injury/illness.



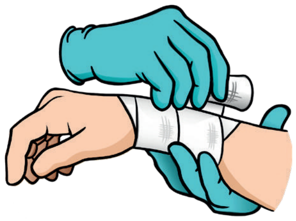
Rest: Avoid putting weight or strain on the injured area.

Ice: Apply ice packs to reduce swelling and pain.

Compression/Pressure: Use a bandage or compression wrap to reduce swelling.

Elevation: Keep the injured area at or above the level of the chest to help minimise swelling.

Compression Bandage



Meaning: A compression bandage is a stretchy wrap used in sports to apply pressure to a specific area of the body.

Uses: It helps reduce swelling, provides support and improves blood flow in the injured area.

Crutches

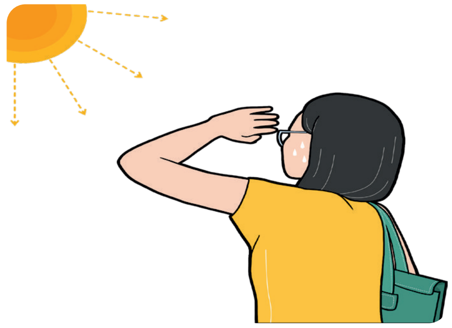
Meaning: Crutches in sports first aid are used to support and stabilise injured limbs, such as ankles or knees.

Uses: Allowing athletes to move without putting weight on the injured area. Crutches should be properly fitted and used under supervision to avoid accidents and ensure effective support for sports-related injuries.

Safety Education

Objectives

- To develop awareness among students regarding safety on the playfield in sports and safety measures during various climatic conditions.
- To develop knowledge and skills to practise first aid.



Safe Play Field & Safety Measures

Safety Education

Safe Play Field:

The safety play field in sports is a designated area where athletes can compete without unnecessary risks or hazards. It is a crucial aspect of any sport to ensure the well-being of players. Safety measures include proper equipment, fair play rules and adequate supervision. Creating a safe playfield promotes enjoyment, reduces injuries and enhances the overall experience for everyone involved.

A "safe playfield" in safety education in sports refers to creating an environment where participants can engage in sports activities without unnecessary risks of injury.

Uses: Ensures proper equipment, supervision, rules enforcement and education on safe practices.

Safety during different climatic conditions

1. Hot Weather: Stay hydrated by drinking plenty of water before, during and after activity. Wear lightweight, breathable clothing to regulate the body temperature. Take frequent breaks in shaded or cool areas. Use sunscreen to be protected against sunburn. Be aware of signs of heat exhaustion or heatstroke and seek medical attention if necessary.

2. Cold Weather: Stay dry by promptly changing out of wet clothing. Ensure proper protection of extremities with gear like gloves, socks and hats. Dress in layers to regulate body temperature and prevent overheating. Use moisture-wicking fabrics to keep sweat away from the body, aiding in temperature regulation and comfort.

3. Cold condition: Wear waterproof or water-resistant clothing and shoes. Use non-slip footwear to prevent slipping on wet surfaces. Increase visibility with reflective accessories or brightly coloured clothing. Be aware of lightning and stay indoors if there is a thunderstorm.

4. Extreme Weather Conditions: Prioritise safety by avoiding outdoor activities during severe weather conditions. Stay informed about weather forecasts and heed warnings from authorities. Seek shelter indoors or in a sturdy structure during storms or high winds.

If caught outdoors, find low-lying areas away from tall objects and lie flat on the ground if necessary.

Appropriate warm-up and cool-down exercises for safety:

Warm-up exercise: Jog or walk for five to ten minutes to increase heart rate and warm up muscles. As the body warms up, gradually increase the intensity of the exercise but avoid overexertion.

Cool-down exercise: Go for a slow jog or short walk for five to 10 minutes to gradually lower the heart rate and ease the muscles.

Focus on the major muscle groups and perform the static stretch for 15 to 30 seconds. Water and a healthy snack can return to normal condition.

Activities

1. Role-play First Aid Scenarios:

Group students into pairs or small groups. Provide each group with a scenario involving a minor sports injury (like a sprained ankle or a cut). Encourage them to use simple props like bandages or improvised slings.

2. Safety Poster Creation:

Provide students with materials like paper, markers and safety guidelines. Ask them to create posters that illustrate safety tips for various sports activities. Emphasise the importance of clear, simple instructions and eye-catching designs.

3. Safety Relay Race:

Set up a relay race with stations representing different safety tasks. Tasks could include correctly applying a bandage, identifying hazards or demonstrating proper stretching techniques. The team that completes all tasks correctly and safely wins.

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Class 7

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Physical Literacy

Physical Fitness

Physical fitness is a state of health and well-being. It develops the capacity to perform better in sports and day-to-day routine work.

There are two types of physical fitness.

1. Health-related physical fitness.
2. Skill or performance-related physical fitness.

1. Health-related physical fitness

Physical fitness directly influences the health of an individual. So to keep ourselves healthy, fitness sessions should be incorporated in our daily routine.

There are five components of health related to physical fitness —

1. Cardiovascular Endurance
2. Muscular Strength
3. Muscular Endurance
4. Flexibility
5. Body Composition

1. **Cardiovascular endurance:** Cardiovascular endurance is the ability to exercise the entire body for long periods of time. It requires a strong heart, healthy lungs and clear blood vessels to supply the body with oxygen.
2. **Muscular strength:** It is the amount of force an individual can put forth with his muscles.
3. **Muscular endurance:** Muscular Endurance is the ability to use the muscles, which are attached to the bones, many times without getting tired. People with good muscular endurance are likely to have better posture, have fewer back problems.
4. **Flexibility:** It is the ability to perform movements in certain joints with the proper range of motion.
5. **Body composition:** The relative amounts of muscle, bone and fat in the body.

2. Skill or performance-related physical fitness

There are 6 skill-related fitness components: agility, speed, balance, coordination, power and reaction time.

Agility : Agility is the ability to move the body quickly and easily. This also includes the ability to change directions and still maintain the balance.

Speed : Speed is the ability to move fast and perform a certain movement in a short amount of time.

Balance : Having good balance means being able to maintain the centre of gravity when moving or standing still. Balance is key not only in sports but also in everyday life, such as when you walk or sit.

Coordination : The ability to do activities that require the use of hands and eyes simultaneously. This skill is important in a lot of sports.

Power : This is the amount of force that the body is able to exert while performing certain movement.

Reaction time : The reaction time is the amount of time it takes for the body to recognise an outside stimulus and react to it through some kind of movement.

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Class 7
Unit 2

Physical Development

Calisthenic Exercises

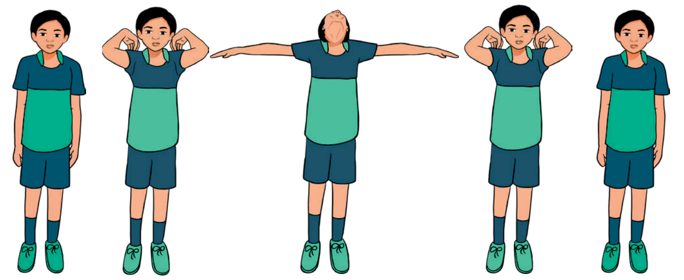
Objective

- To enhance physical development through a combination of Calisthenics and Light Apparatus Exercises.

Starting position: Stand with feet slightly apart.

Exercise – 1

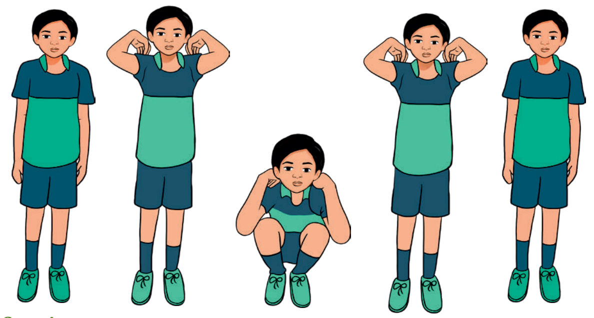
1. Raise both arms sidewards at shoulder level, bend the elbows and place the fingers on the shoulder.
2. Stretch the hands sidewards at shoulder level and tilt the head backward.
3. Same as count 1.
4. Back to the starting position.



Starting position

Exercise – 2

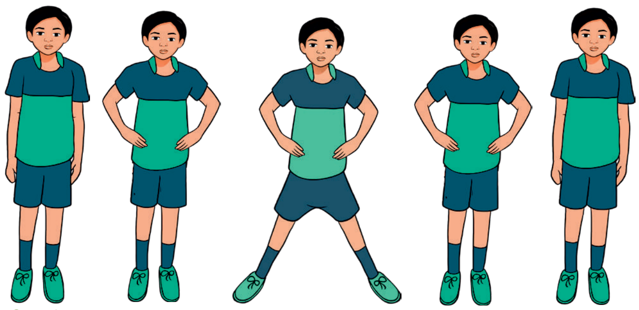
1. Raise both arms sidewards and bend the elbows and place the fingers on the shoulder.
2. Sit in a squat position with folded elbows.
3. Same as count 1.
4. Back to the starting position.



Starting position

Exercise – 3

1. Place hands on hip.
2. Jump and set the feet apart.
3. Same as count 1.
4. Back to the starting position.

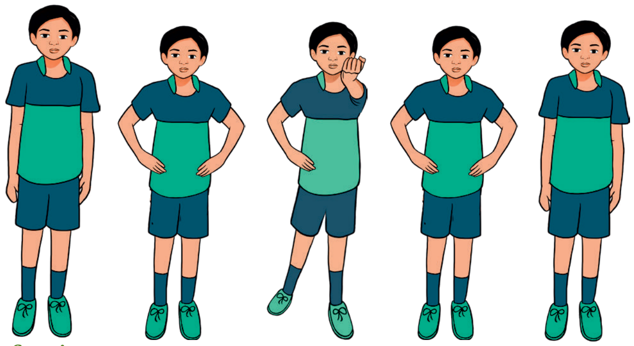


Starting position

Exercise – 4

1. Place the hands on the hip.
2. Stretch the left hand forward and place the right leg one step backward.
3. Place the left leg one step backward and join to the right leg. Place the left hand on the hip and stretch the right hand forward.
4. Back to the starting position.

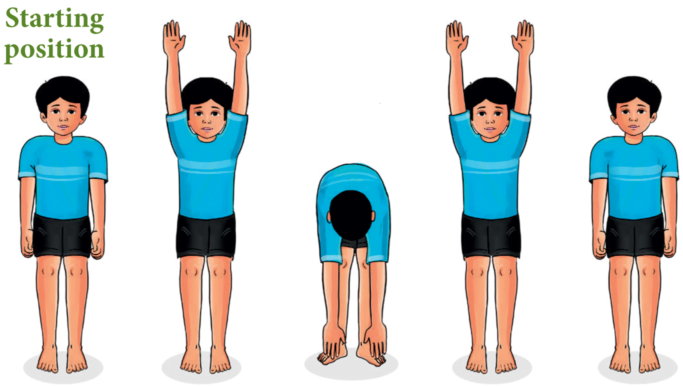
(Repeat the exercise with forward movement, alternating legs each time.)



Starting position

Exercise – 5

1. Jump, feet apart and raise the hands above the head.
2. Bend forward and touch the ground with the hands.
3. Same as count 1.
4. Jump and back to the starting position.

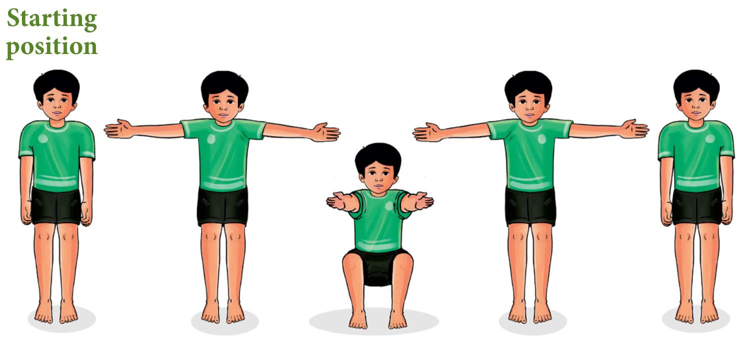


Exercise – 6

1. Jump, feet apart and raise the arms sidewards above the head.
2. Take the left leg one step to the left and lunge to the left side.
3. Same as count 1. (Straighten the left knee and bring right leg to the left leg)
4. Jump and back to the starting position.

Exercise - 7

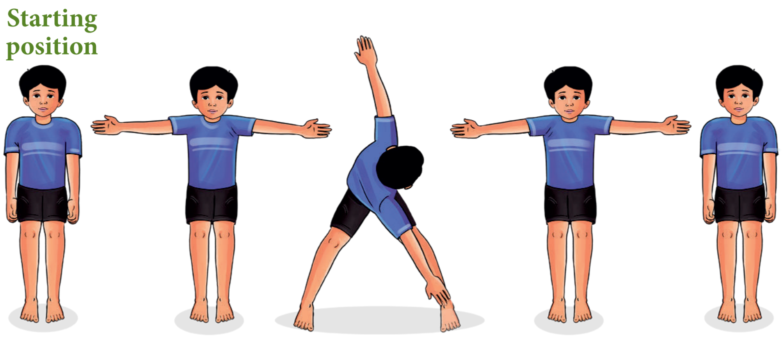
1. Raise the arms sidewards.
2. Sit in a half squat position; bring the arms forward.
3. Same as count 1.
4. Back to the starting position.



Exercise - 8

1. Jump with feet apart and raise the arms side wards.
2. Bend forward, twist the trunk to the left and touch the left toes, with right hand.
3. Same as count 1.
4. Jump and back to the starting position.

(Repeat the exercise for the right side too.)



Light Apparatus Exercises

Hoop Exercises

Starting Position: Stand with feet slightly apart. Hold the hoops closer to the chest and parallel to the body.

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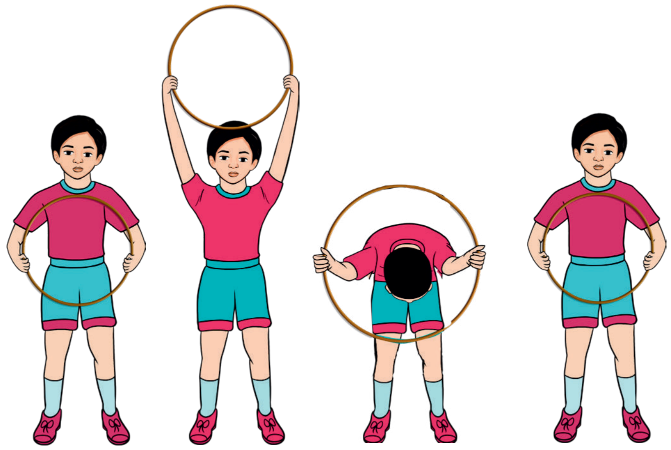
Exercise – 1

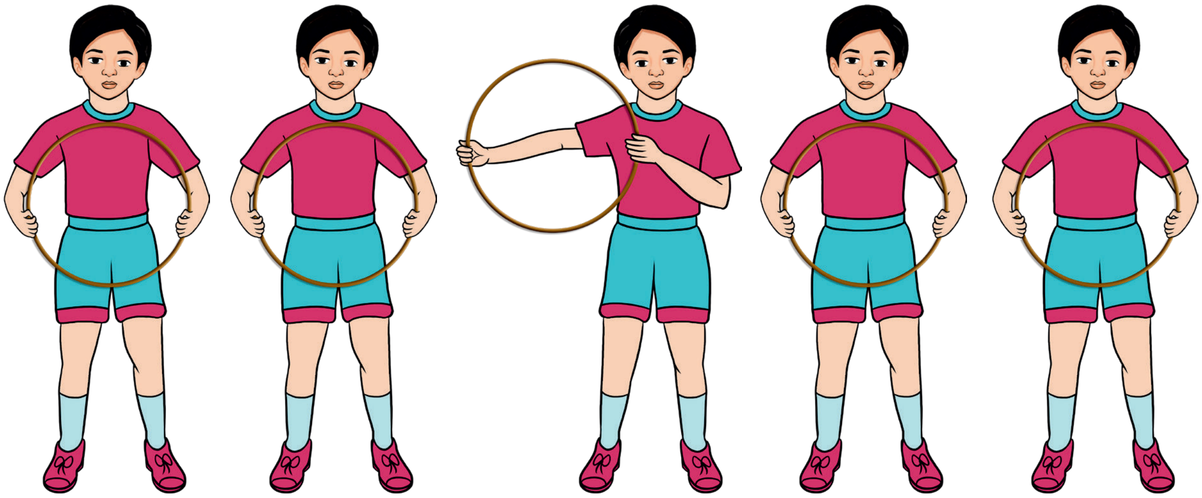
1. Raise the hoop vertically above the head.
2. Bend forward and keep the hoop in a vertical position in front of the head.
3. Same as count 1.
4. Back to the starting position.



Starting position

Exercise – 2

1. Bring the hands forward at shoulder level and keep the hoop vertical.
2. Bring the hoop to the left shoulder and keep right hand near the left hand shoulder.
3. Same as count 1.
4. Back to the starting position.

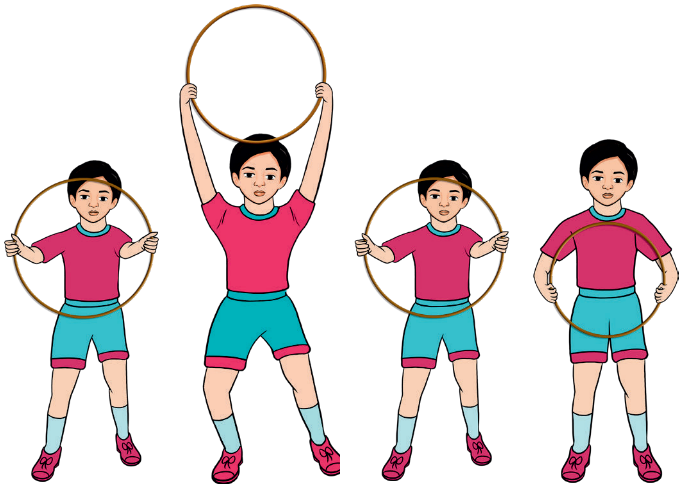


Starting position

(Repeat the same for the right hand side too)

Exercise - 3

1. Put the right leg forward and bring the hoops forward with the elbows straight and the hoop vertical.
2. Lunge on the right leg by bending the knee, raise both arms above the head and keep the hoops vertical.
3. Same as count 1.
4. Return to the starting position.



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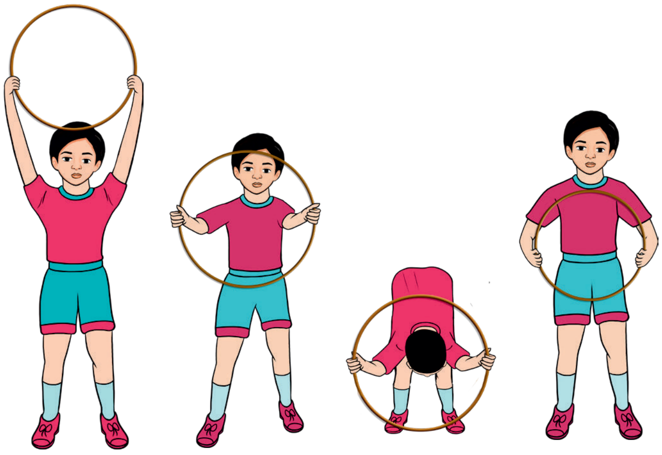
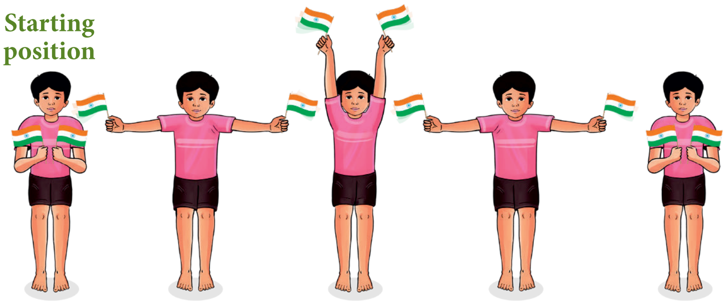
Exercise - 4

1. Raise both arms above the head and place the hoop vertical.
2. Put the right leg forward and keep the hoop vertically at shoulder level.
3. Bend the right knee and bend forward. Keep the hoop on the ground vertically.
4. Return to the starting position.



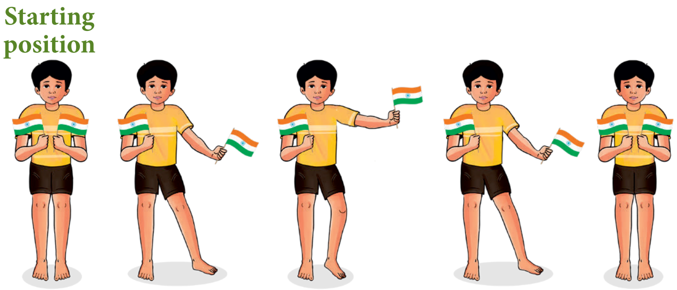
Flag Drills

Starting position: Stand with feet apart and hold the flags in each hand, flex the elbow keep hands closer to the chest.



Exercise – 1

1. Bring the hands to the sidewards at shoulder level and hold the flags straight.
2. Raise the hands above the head.
3. Same as count 1.
4. Back to the starting position.



Exercise – 2

1. Take the left leg forward, 45° to the left side and raise the left hand forward, 45° at shoulder level.
2. Bend the left knee and lunge to the left side and raise the hand slightly higher.
3. Same as count 1.
4. Back to the starting position.

(Repeat the exercise for the right side too)

Exercise – 3

1. Move the left leg to the left side, bring the arms sideward with the flag.
2. Raise both arms above the head with the flag.
3. Same as count 1.
4. Back to the starting position. (Do the same exercise for the right side too.)

Exercise – 4

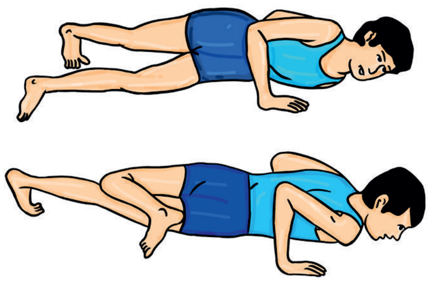
1. Raise both arms sidewards and swing the flags twice using the wrist action.
2. Raise the arms upward and then swing the flags twice using the wrist action.

3. Same as count 1.
4. Back to the starting position.
   (Repeat the same for 16 counts.)

Indigenous Exercises

Snake Dand

- Place the body parallel to the ground. Place the palms on the ground with elbows straight so that the body weight is on the hands and the toes.
- Bend the left elbow and move the left hand 6 inches forward and move the right leg forward under the left leg. Turn the face to the left. Do all three moves simultaneously.
- Straighten the elbow.
- Bend the right elbow and take the right hand 6 inches forward and move the left leg forward under the right leg.
- Turn the face to the right.
- Straighten the elbows.
- Do it continuously for a particular distance.



Pyramid

Four Men Pyramid - 1

- Two students kneel down facing each other and place their palms on the ground.
- Another pair of students should stand behind the kneeling students facing each other and raise their hands to join them.
- Bend forward, to inter-lock their fingers with each other and keep the position.

Four Men Pyramid - 2

- Two students should stand back to back with each other.
- Two more students stand in front of each one with their hands on the floor and lift their legs by holding their ankles to stand upright.

Gymnastics

Objectives

- To develop body awareness and basic movements in gymnastics.
- To teach and train forward roll.

Forward Roll

Teaching the Skill

Body awareness and basic gymnastic movements are crucial for physical development on the part of gymnastics. Engaging the students in gymnastic activities helps to improve the strength, flexibility, coordination and balance which are important for overall fitness. It also enhances motor skills like agility, speed and spatial awareness and makes it easier to control the body effectively and easily. Mastering these movements builds confidence and self-assurance and ultimately, learners see progress in their abilities.

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Teaching the Forward Roll

Starting Position

Stand on a gymnastic mat or on a flat surface. Squat down with the feet together. Place hands on the ground in front, shoulder-width apart, with the elbows bent.

Head Placement

Drop the head between the arms, tucking in the chin. While moving into the roll, avoid placing weight on the neck; it should move directly onto the upper back.

Forward Roll

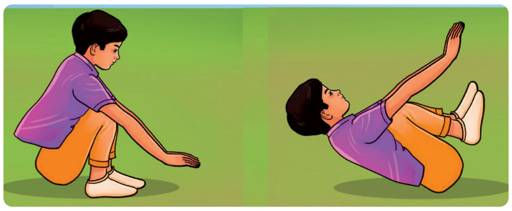
Push over onto the upper back, rolling forward. Keep back curved and follow the curve of the spine. Maintain straight legs and pointed toes throughout the roll.

Standing Up Without Hands support

- At the end of the roll, place the feet flat on the floor.
- Stand up without using hands for support.
- Push the upper back while doing the roll.

Practising the Skill

Rocking Back and Forth:



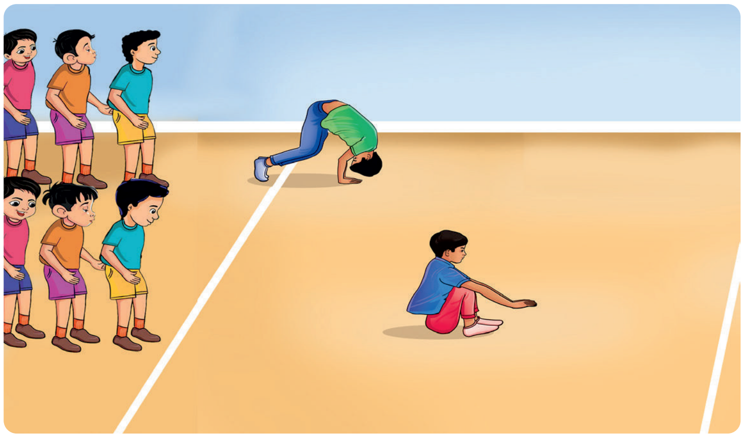
Allow the students to practise rocking backward and forward in a tuck position.

Roll Up to Stand:

Students pair up. One student lies in a tuck position and the other gently pulls them up to stand. Gradually reduce assistance until they can stand up independently.

Lead-up Activity

Forward Roll Relay



Group students into two groups. Draw a boundary line of ten metres from the starting line. Line up both teammates at the starting line as shown in the picture. As soon as the teacher whistles, the first player in each team has to do a forward roll towards the boundary line and return to the starting line. All the students in the team have to do the same and the team that completes first will be declared the winner.

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Class 7
Unit 3

Sports Education

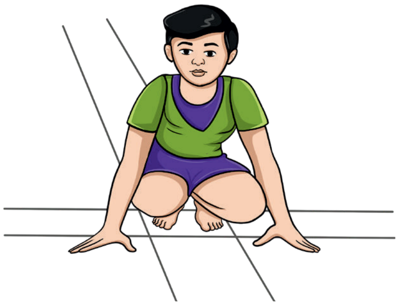
Kho-Kho

Objectives

- To develop the skills of Sitting Chaser Position, Receiving Kho and Giving Kho in the game of Kho-Kho.
- Quick stride, agility and coordinating information are the essential skills to win the game.

Teaching the Skill

Teaching the skill of sitting chaser position



- **Sitting chaser position:** Chasers should sit in their respective alloted squares along the centre lane, alternatively in the opposite direction. Chasers have to sit with folded knees and be alert to move from the place immediately after receiving Kho. This allows them to cover both sides of the field.
- **Receiving Kho:** When the active chaser touches a sitting chaser and says "Kho", the sitting chaser becomes the active chaser and starts chasing the runner.
- **Foot Placement:** The chaser/attacker team player must keep their foot out of the box with care, as their foot will decide which way they will run to chase the runner.

Teaching the Basics of Giving "Kho"

- "Kho" is the signal given by the active chaser to a sitting chaser to start the chase.
- The word "Kho" must be said loudly and clearly.
- The active chaser must tap the sitting chaser with their palm and say "Kho" simultaneously.
- The active chaser should not give "Kho" by touching the extended arm or leg of the sitting chaser.
- After giving "Kho", the active chaser should sit down immediately.

Practising the Skill

Activity: Chain Kho

- Students should sit in an eight-square box formation, resembling a Kho-Kho game setup.
- Other students should line up one after the other near one of the poles. When the teacher blows the whistle, the first student in line should pass the Kho to the student sitting in the box and then take his/her place.
- This process should continue. The next student should start only after the previous student reaches the pole.
- The student who reaches the pole should stand at the last in the line. All students should continue this practice.

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Lead up Activity

Speed Kho

Organise the students into two groups. Ensure proper spacing as players sit in a square formation similar to Kho Kho. Designate the first student in each team as the captain. The captain passes the Kho to the next person when the teacher blows the whistle. Each student passes the Kho until it reaches the last student in the team. The last student runs around teammates and give "Kho" back to the first seated teammate. The game continues until each team's captain returns to their original position. The team whose captain returns first wins.

Basketball

Objective

- To develop the dribbling skill in the game of basketball.

Practising the Skill

Basketball is one of the widely played and viewed games in the world. As basketball is a fast game, it helps in keeping us fit by building endurance, motor coordination, muscle strengthening and improving balance.

Dribbling skills are crucial in basketball. Focussing on control, speed and agility are main factors for dribbling. Speed helps the players move quickly with the ball for scoring chances. Agility is essential for dodging defenders and changing direction swiftly. Mastering dribbling improves a player's ability to drive, create scoring opportunities and support their team. The teacher should explain the importance of dribbling and give practice.

Dribbling Skill

Teaching the dribbling skill

- **Feet Shoulder-Width Apart:** Feet should be approximately shoulder-width apart to provide a stable base and move in any direction.
- **Knees Slightly Bent :** Bend the knees to lower the centre of gravity, which helps with balance and agility.
- **Lean Forward Slightly:** Upper body should lean forward slightly, keeping chest up and eyes forward to maintain visibility of the court.
- **Hand Position:** Place the palm on top of the ball with the fingertips spread across the surface for better control.
- **Ball at Waist Height:** The ball should be bounced at waist height.
- **Protect the Ball:** Bend the non-dribbling arm in front to shield the ball from defenders.

Practising the Skill

Tips for Teaching

- Use the fingertips to bounce the ball.
- Bend the knees and keep the body slightly low while moving.

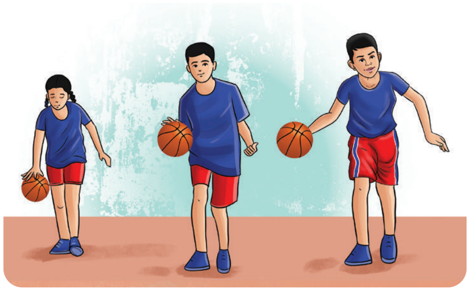
- Try to keep the head up as much as possible.
- Keep the hand above/ on top of the ball while bouncing it.
- Bounce the ball within every one and half step.

Drill 1: On the spot Dribbling

- Players should stand a feet apart at shoulder level with knees bent and dribble the ball at waist height in the same place.

Drill 2: Controlled Dribble

- Set up a straight line and make them dribble in the straight line. Focus on maintaining control while manoeuvring the dribble.



Drill 3: Speed Dribble

- Instruct the students to dribble down the court at full speed, while keeping their non-dribbling hand in front side. Encourage the students to dribble the ball by using the wrist.

Lead up Activity

Cone Dribble Relay

Equipment Needed: Basketballs, Cones.

Arrange six cones in a straight line at a distance of 3 feet. Organise the players into two teams and line them up behind the starting line. After the teacher's instruction, the first player in each team dribbles the ball through the cones to the opposite end of the court and dribbles back through the cones to the starting line and handover the ball to the next student. The student who received the ball in line then takes their turn and repeats the process. The relay continues until all players have completed the course. The team which completes the dribbling first will be the winner.

Table Tennis

Objective

- To develop the forehand and backhand drive skill in table tennis.

The forehand drive in table tennis is a fundamental offensive stroke, where the student strikes the ball with forward and upward motions using the forehand side of the racket. This stroke generates speed, spin and accuracy, making it an essential skill for attacking play. Mastering the forehand drive involves proper footwork, time, racket angle and follow-through to execute powerful and consistent shots. Practice drills focusing on coordination, technique and anticipation that can help students to refine their forehand drive and improve their overall performance on the table.

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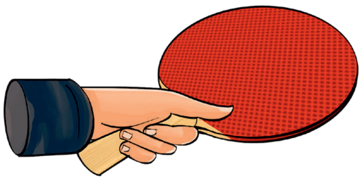
Teaching the Skill

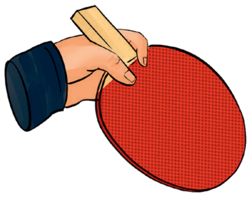
There are the four major grips in table tennis:

1. Handshake
2. Pen hold
3. Seemiller
4. V-grip.

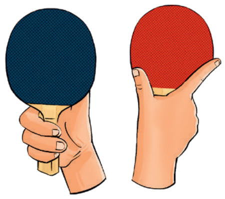
Handshake



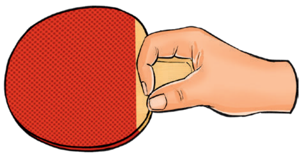
Pen hold



Seemiller



V-grip.



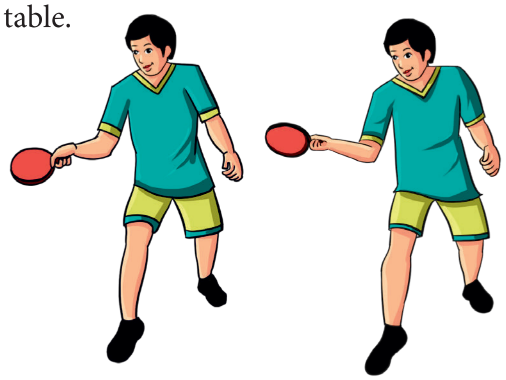
Teaching Basic Stroke - Forehand Drive:

Step 1: Stance

- Feet apart at shoulder width and stand facing the table.
- Bend the knees slightly and balance the feet evenly
- Move body to the right (for right-handed players) to position for the forehand drive (vice-versa).

Step 2: Ball Contact

- Watch the ball and wait for it to bounce on the side of the table.
- Make contact with the ball at the peak of its bounce.
- Strike a firmly at the centre of the ball.



Step 3: Follow-Through

- After making contact, follow through with paddle, keeping it in the same position.
- Keep the eyes on the ball and be ready to play for the next shot.

Teaching Basic Stroke - Backhand Drive

Ready Position

- Crouched with the feet and body facing the direction and aim to play the ball close to the table.

Backswing

- Keep the racquet at the required angle for backhand push and bring the racquet towards the stomach.

Striking the Ball

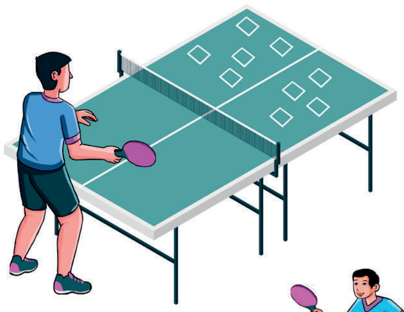
- Contact the ball when it bounces from the board by adjusting the position of the elbow.
- Contact just before the peak of the bounce.
- Keep the feet on the floor and make the body stable.

Ready Position

Backswing

Follow Through and Recovery

- Finish the shot and keep the wrist straight as a follow-through action.
- Recover back to the ready position.



Practising the Skill

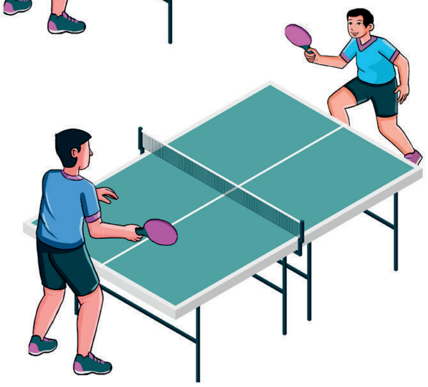
Activity: 1 Target Practice

Place targets on the table and practise hitting them with forehand drive.

Set up targets (e.g., cones or other objects) on the table.

Vary the target placement to make it more challenging.

This will improve attacking skill.



Activity 2: Forehand Drive with Partner

Partner up and aim to hit 10 - 20 forehand drives in a row without missing.

Lead up Activity

Around the World Forehand Drive Challenge

Students stand at the opposite sides of the table. Take turns hitting the ball at different spots on the table, aiming to hit each spot in a sequence. The first student who successfully hits all spots in order wins the game. Emphasise maintaining a consistent racket angle and contact point while executing the forehand drive. By varying the distance and angle of shots, they gradually increase the challenge. Give 10 points for every correct forehand hit. The team which scores more points is the winner.

Tennikoit

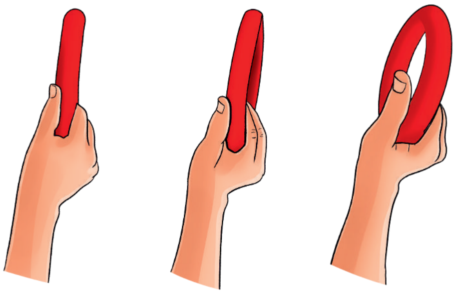
Objective

- To make the students learn basic skills in Tennikoit.

Teaching the Skill

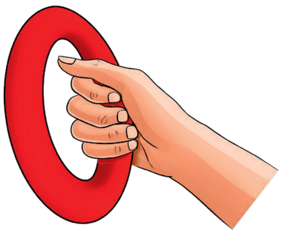
Teaching fundamental skills in Tennikoit involves focussing on key aspects such as grip, standing position, forehand spin and backhand spin. These elements are essential for players to develop a strong foundation in the sport.

Teaching the fundamental skills



Grip

- Hold the ring with the dominant hand.
- Place the thumb on one side of the ring and the fingers on the opposite side.
- The grip should be firm to control the ring but relaxed enough to allow for a smooth release.



Forehand spin

- Stand in position with feet slightly apart at shoulder-width to hold ring's outer surface with the right hand.
- Extend arm holding ring, forward and slightly upward. Throw up the ring by flicking wrist to get spin.

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Backhand spin

- Stand in position with feet slightly apart at shoulder-width to hold ring's inner surface with right hand.
- Keep the arm close to the body, to swing it across in a backhand motion. Release the ring with a flicking of the wrist to get spin.

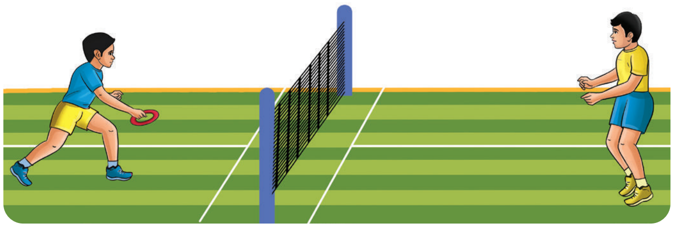
Receiving

Koit receiving is an important skill for successful play of tennikoit. It is the action of catching the incoming koit with one hand. It needs swift reaction time to receive the koit well.

- Position yourself by anticipating the opponent's throw and koit's trajectory.
- Keep palm open to receive with dominant hand.
- Bring back palms slightly at the moment of receiving to reduce the impact and speed of koit. This action helps to avoid rebounding of the koit from the palm.

Practising the Skill

Activity 1: Forehand Spin



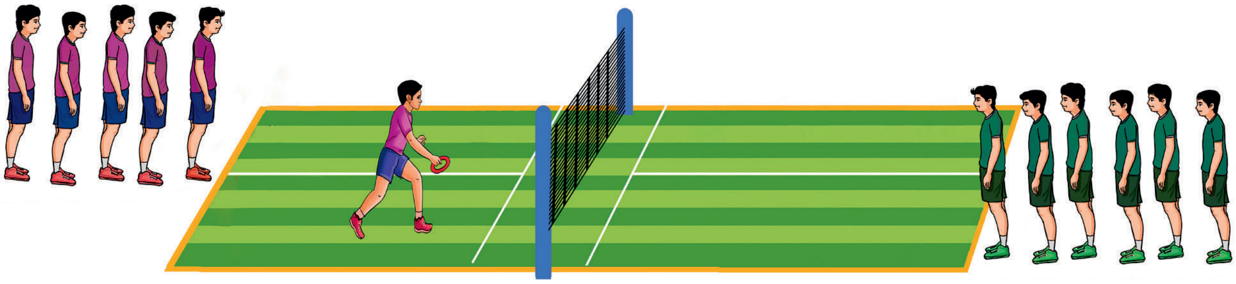
- Student stands alone with a ring in the right hand and practices **forehand spin** by throwing it upward and catching it. Each student should do it 20 to 30 times.

Activity 2: Backhand Spin

- Two students facing each other at a distance of 10 feet to practise **backhand spin** by throwing and catching each other.

Lead-Up Activity: Rally Game

Team Formation: Organise students into teams of 5, labelling them as Team A and Team B.



Court Setup: Position one student from Team A inside the court, facing the opponent Team B members who stand on the baseline of the opposite court with a ring.

Gameplay: Upon a signal, members of Team B take turns flinging the ring into Team A's court. The objective of Team A is to receive the ring and fling it back using forehand and backhand spins. Each member of Team A participates in the rally. All the members of Team B have to fling the ring to the first student of Team A. Once completed, this should be repeated to all the students of Team A. After the specific time or score, teams change the positions with Team B moves inside the court and Team A to the baseline, continuing the game.

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Scoring System: Assign points as follows:

- Successfully returning the ring: 2 points.
- Receiving but failing to return: 1 point.
- Committing a fault: 0 points.
- Add up the scores of each member of the team to determine the team's total score and declare the winner.

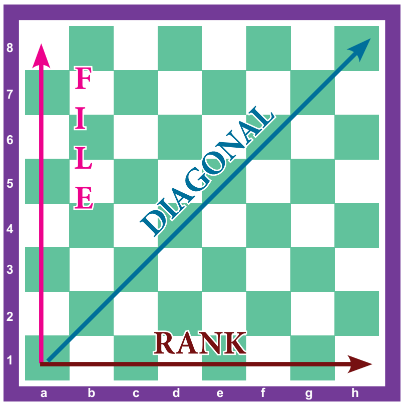
Chess

Objective

- To introduce and develop the basics of algebraic notation in the game of chess.

Algebraic notation is a method used to record chess moves by representing each square on the chess board with a unique letter and number. This system helps players to easily analyse the games using standard notation. Moves are recorded by specifying the name of the piece moved, followed by the destination square. E.g. Nf3, ie. Knight moves f3 square.

Black



White

Fig: 1

Teaching the Skill

Algebraic Notation

Algebraic Notation describes each move with the name of the pieces and the squares to which it is moved. Each square of the board is identified by a letter and a number.

Files

The vertical columns of the squares are called files. It is numbered 1 to 8 from bottom to left corner, starting from White side of the board (Fig: 1).

Ranks

The horizontal rows of squares are called ranks. The letters represent the files (columns) from left to right (a to h) on the White side (Fig: 1).

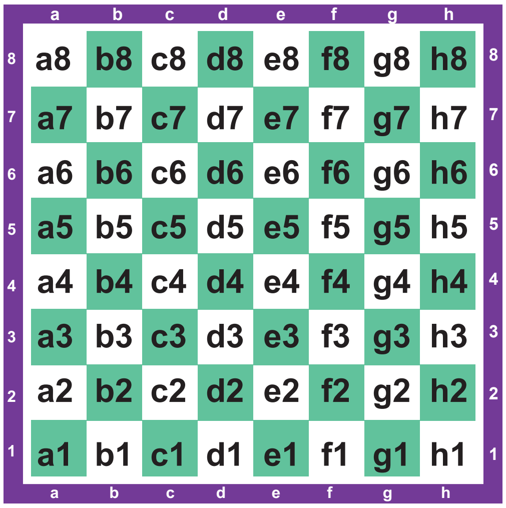
- The bottom-left corner square is a1 (dark square if the board is oriented correctly).
- The square above is a2, a3 and so on.
- The square to the right of a1 is b1 and the one above it is b2, b3 and so on.

Diagonal

It constitutes squares a1 to h8 diagonally on the board (Fig: 1).

Each piece is represented by an uppercase letter:

Symbol	Meaning	Symbol	Meaning
K	King	Q	Queen
R	Rook	B	Bishop
N	Knight	x	Captures
+	Check	++ or #	Checkmate
0-0	Castles King's side	0-0-0	Castles Queen's side



Pawn (the "P" is usually omitted from notation, but the destination square is specified).
The following is the procedure for writing down the moves of chess players during a game of chess.
x: Use "x" to indicate captures.
0-0: Castling is denoted by **0-0** for King side.
0-0-0: Castling is denoted by **0-0-0** for Queen side.
0: Denotes number of squares moved by rook.

After a game is over, the result has to be noted with this special notation.
If White wins, then it is noted as **1-0**.
If Black wins, it is noted as **0-1**.
while a draw is noted as **1/2-1/2 (=)**.

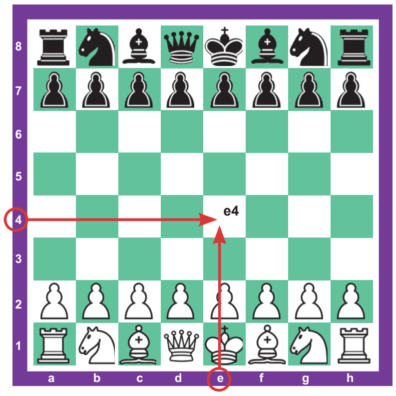


Fig: 2

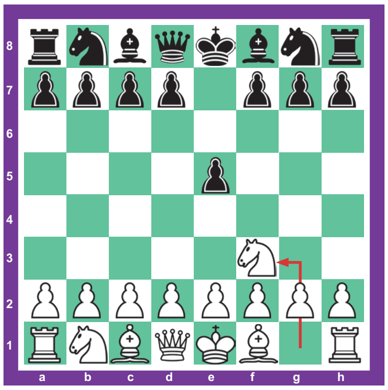


Fig: 3

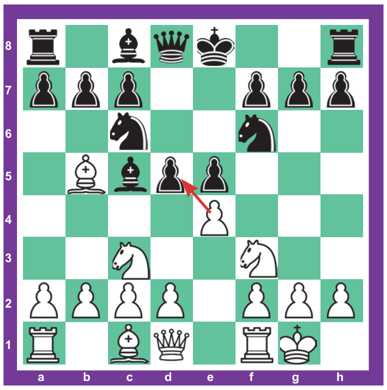


Fig: 4

In Fig: 2, the first move pawn is made to e4. The name of this move is simply, "e4" (since the pawn's name is not written).

Now, White has made a Knight move and it can be written as "Nf3". Next Black replied e5. Notice how the name of the piece is written as well as the name of the square. N - Knight; f3 - place of the square (Fig: 3).

In Fig: 4, White captures Black's pawn on d5. This move is called exd5. For "capture" write an "x".

Practising the Skill

Activity 1

White (you) starts. You can

Move your pawn from e2 to e4: e2-e4

Move your Knight from g1 to f3: Ng1-f3

Move your Knight from b1 to c3 : Nb1-c3

Note: This can be represented in score sheet form.

Activity 2

e4 - pawn moves from e4 square
Be4 - Bishop moves to e4 square
Kg1 - King moves to g1 square
Qf8 - Queen moves to f8 square
Ra7 - Rook moves to a7 square
Nf3 - Knight moves to f3 square

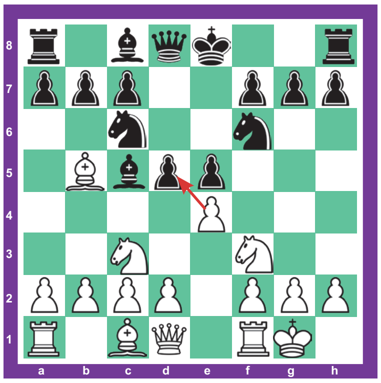


Fig: 5 - Before capture

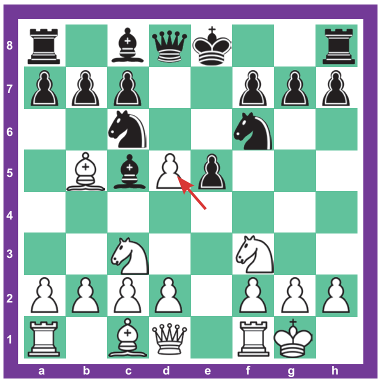


Fig: 6 - After capture

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Capturing

exd5 - white pawn on 'e' square captures black pawn on 'd5' (Fig: 5,6).

Lead up Activity

Organise students into two groups. Write the moves on a small piece of paper according to the number of students (for example e2-e4) and fold them and place them in a box. One person from each team takes the card and makes the moves marked on it on the chessboard placed on the table. Award a point for a correct move. Thus all the students should play this game. In the end, whichever team gets the more points is declared the winner.

Sprint Technique

Objective

- To train and develop the sprint technique includes focusing on aspects such as body posture, arm movement, leg action and stride length.

Teaching the Skill

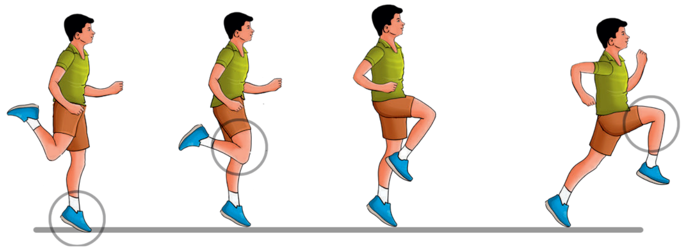
Demonstration and Explanation: Begin by demonstrating the proper technique for each phase of the running stride in slow motion.

Support Phase - Front Support:

- Landing on the ball of the foot.
- Minimal knee bend of the support leg during amortisation, with the swing leg doubled up.
- Extend the hip, knee and ankle joints with the support of leg for take-off.
- Quickly raise the legs and thighs and move towards a horizontal position.

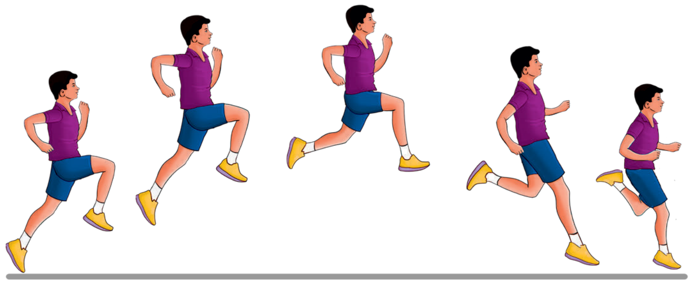
Support Phase - Drive:

- Keep the shoulders relaxed.
- Use a fast, relaxed arm action emphasising the drive backwards.
- Run evenly and balance.
- Maintain visual focus ahead.



Flight Phase - Front Swinging:

- The knee of the swing leg moves forward and upward to continue the drive and increase stride length.
- The knee of the support leg flexes markedly in the recovery phase to achieve a short pendulum. The arm swing is active but relaxed.
- Next the support leg sweeps backwards to minimise the braking action at touchdown.



Explain each of these technical points in detail, emphasising their importance for efficient and powerful running mechanics.

Practising the Skill

Practising Running Technique – Arm Action

- Start in a parallel stance and slowly perform the arm action for 15 seconds.
- Switch to a diagonal stance and perform the arm action as fast as possible for 8 seconds.

- Swing the arms forward and backward, keeping the hands from crossing the midline of the body.
- Maintain a 90° angle at the elbows while swinging the arms.
- Keep the fingers gently closed.

High Knee Marching

- Mark a 30 metre distance and practise high-knee marching.
- Raise the knees up to hip level while marching. March on the toes, keeping the heels from touching the ground and maintain an upright posture.
- Coordinate the arm and leg movements.

High-Knee Marching with Lower-Leg Extension

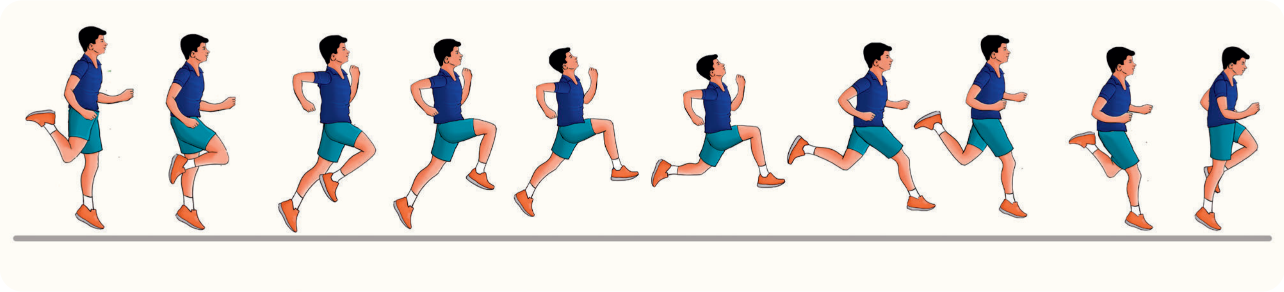
- While marching, raise the knees up to hip level and keep the hips straight.
- March on the toes and as the foot lands, extend the lower leg.
- Maintain an upright posture and coordinate the arm and leg movements.

Butt Kick

- Slowly move forward, flexing the lower leg back so that the heel kicks towards the glutes.
- Keep the body upright and move on the toes, coordinating the arm and leg movements.

High-Knee Running

- Move forward slowly lifting the thighs parallel to the ground.
- Maintain an upright body position and look forward.
- Coordinate the arm and leg movements and run on the toes.



High-Knee Running with Knee Extension

- Move forward slowly lifting the thighs parallel to the ground.
- Then, extend the lower leg as you run on the toes.
- Maintain an upright body position, look forward and coordinate the arm and leg movements.

By practising these drills and exercises, students can develop and refine their running technique, focusing on proper arm action, knee lift and lower leg extension to improve their overall running efficiency and performance.

Lead up Activity

30m race

Clearly mark the starting point and the 30m finish line for accuracy and fairness in the race. Gather all participating students, assign them to lanes or starting positions. Ensure all participants are behind the starting line, ready to begin. Signal the start with a whistle, verbal command or starting gun after confirming readiness. Instruct students to run the 30m distance, focussing on form and effort. Mark the finish line clearly for accurate timing and student aim. Record finishing times, announce winners and commend all participants. Celebrate the race completion, recognising students' hardwork and sportsmanship.

Running Technique

Objective

- To train and develop the students in the correct way to run, emphasising posture, stride, arm motion and foot placement, to improve their speed, efficiency and safety while running.

Sprinting

Teaching the Skill

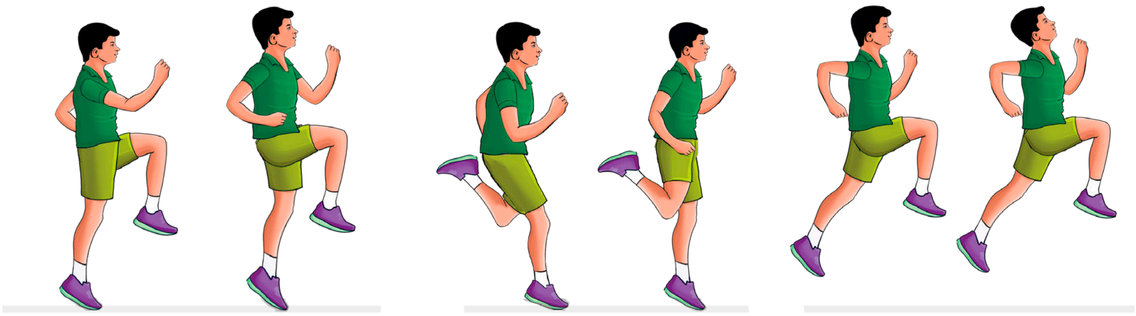
Running technique: Running technique involves holding the body, moving the arms and placing the feet while running. Sprinting focuses on covering short distances (typically upto 400 metres) as quickly as possible, while middle and long distance running involves covering longer distances (ranging from 600 metres to several kilometres) at a sustained pace. In sprinting, athletes exhibit longer strides and a higher stride frequency (the number of steps taken per minute), allowing them to cover ground quickly with powerful movements. In middle and long distance running, athletes typically have shorter strides and a lower stride frequency, focussing on maintaining a sustainable pace over a longer duration.

- **Posture:** Demonstrate proper posture by standing tall with head up, shoulders relaxed and arms bent at 90 degrees.
- **Foot Placement:** Demonstrate proper foot placement by landing feet directly under the body, avoiding overstriking.
- **Arm Swing:** Demonstrate proper arm swing by allowing arms to swing naturally back and forth without crossing the body.
- **Rhythm:** Explain the concept of rhythm as the number of steps per minute and demonstrate a rhythm of around 180 steps per minute.
- **Stride Length:** Emphasise maintaining a comfortable and natural stride length while focusing on a high rhythm.
- **Breathing:** Demonstrate the importance of deep and rhythmic breathing during running and demonstrate proper breathing technique.
- **Visualisation:** Encourage students to visualise themselves moving smoothly and effortlessly while running.

Practising the Skill

Guidelines for the Exercises

1. Incorporate drills and intervals to help students refine their posture, foot placement, arm swing, rhythm, stride length, breathing and visualisation.
2. Student Practice: Have students practise standing in the same posture, emphasising the importance of maintaining a slight forward lean from the ankles, not the waist.



3. Have students practise landing their feet directly under their body, focusing on a mid-foot strike to enhance efficiency and reduce stress on joints.

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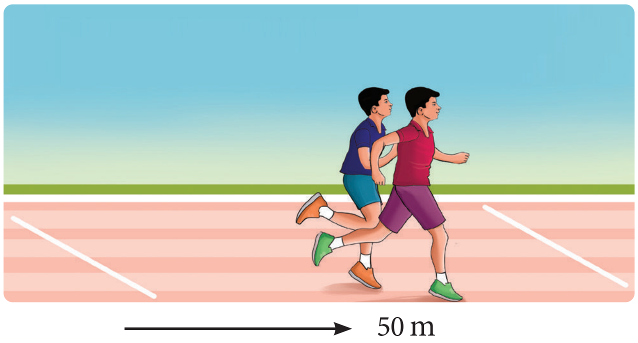
4. Have students practise arm swing, ensuring elbows are bent at 90 degrees and hands remain relaxed for efficient arm movement.
5. Have students practise running with a focus on maintaining a high rhythm, encouraging them to aim for 180 steps per minute.
6. Have students practise finding their optimal stride length through practise and feedback.

Lead-up Activity

The 50-Meter Relay Race:



The starting and running back boundary lines should be drawn at 50-meter intervals. Group the students into two equal teams. Students from two teams should line up one behind the other. Following the teacher's instruction, the first team member moves to the other line, then turns around to contact the team's second member and the second student touches the boundary line before turning around. In a similar way, the race continues until the final student crosses the finish line. At the end, the team that completes the run first will be declared the winner and congratulated.

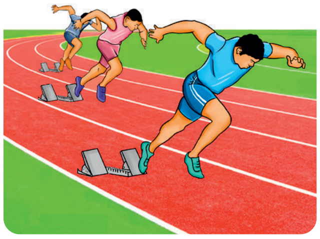
Curve Running Technique

Objective

- To teach the students curve running technique for athletic events like sprints and hurdles.

Teaching the Skills

Curve running technique is a crucial aspect of training for athletics events like sprints and hurdles. It involves developing the skill to maintain speed and control while navigating curved sections of the track, which is essential for success in events like the 200m and 400m sprints, as well as hurdle races. The technique requires athletes to adjust their stride mechanics, body position and arm action to effectively handle the forces and lean of the curve, allowing them to maintain velocity and transition smoothly into the straightaway.



Starting

Crouch start is used for sprinting events. Based on the tangent point, the athlete runs straight from 10m to 15m.

Centrifugal force

While running on a curve, centrifugal force acts on the body. So, naturally, the body has the tendency to move outside. But as per the rules, the athlete should run in their own lane.

Race Technique

While running on the curve, the athlete should maintain equilibrium and avoid lane infringement by leaning their body towards the centre or inside the track, with their entire body, from toe to head, tilting to the left to counteract the centrifugal force and maintain optimal speed.

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Foot placement and Arm Action

When the right foot step comes forward, that stride length is little more than the other step.Arm action will help a lot to maintain stride length and stride frequency. Left hand short swing and right hand will get little extra swing.

Practising the Skills

Drills: Perform some drills on the curve like high knee running, butt kick running, skip running etc. When the athlete does this kind of drills on the curve naturally the curve running technique will improve.

Circle running: The teacher draws a circle and allows the students to run on the circle. Start with slow running and then increase the speed.

Lead Up Activity

Circle run completion

Draw a circle of 10 metre radius. Increase the circle radius to 11.22m, 12.44m, 13.66m and 14.88m. Ensure all circles have the same centre point. Race around the circles, starting from the smallest to the largest. The time taken to complete the circle run is noted. The student who completes all the circles successfully and efficiently in the least time is the winner.

ABC Technique in Jumping

Objective

- To teach and train students the ABC techniques (Approach, Block and Climb) in jumping sports.

Teaching the Skill

The ABC techniques (Approach, Block and Climb) are essential for success in jumping sports like long jump, high jump and triple jump. Mastering these three components can improve a student's performance and help them achieve greater distance or height in these events.

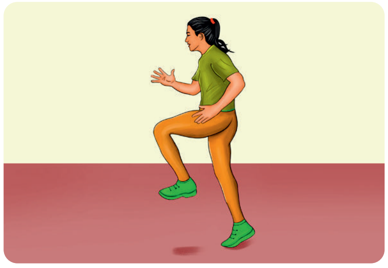
A - Approach: This is the run-up or approach phase before the jump. It involves factors like speed, stride length and angle of approach.

B - Block: This is the take-off or "blocking" phase. It includes the moment of contact with the ground, the body position at take-off and the force generated to propel the jumper upwards.

C - Climb: This is the ascending or flight phase of the jump. It encompasses the trajectory, height attained and body position during the jump.

Understanding and mastering these Approach, Block and Climb techniques are crucial for achieving the success in jumping sports.

1. Skip Run



- Start with the classic skipping movement - double hopping on the right foot, then the left, pumping with the opposite arm.
- Increase the intensity by driving the knees as high as possible and skip forward as you can.

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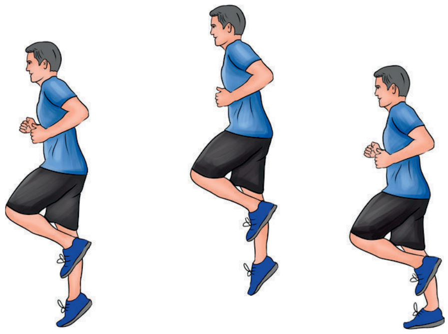
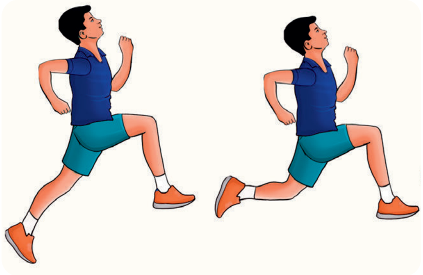
2. Hopping



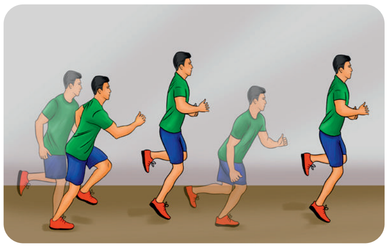
- Stand straight in a neutral position with feet hip-width apart.
- Begin by bending at the knee on one leg while maintaining balance.
- Continue to bend the knee to achieve maximum flexion at the ankle, knee and hip joints.
- To increase the optimal force of the body, press foot on the ground.
- Use the optimal force to push the foot off the ground to raise the other leg.
- Land the raised foot gently on the ground to maintain balance.

3. Bounding



- Stand with feet hip-width apart.
- Initiate the first bound by sweeping the lead leg forward with the knee joint fully extended. The opposite arm should sweep forward to match the range of the lead leg.
- Quickly draw the lead leg back toward the ground with the foot dorsiflexed to prepare for a dynamic landing.

4. One-Hopping One Bounding

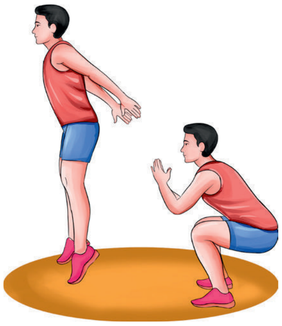


- **Hop:** Take off and land on the same foot.
- **Bound:** Land on the opposite foot.
- Alternate between hopping and bounding.

5. Split Jump

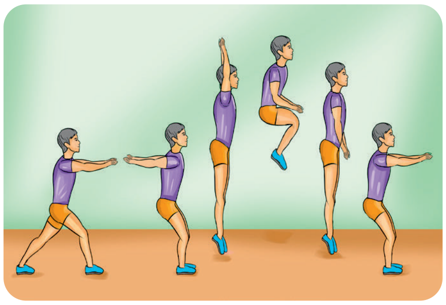
- Stand straight with feet hip-distance apart, hands in front of the chest.
- Take a large step forward with one foot and lower the body into a 90° lunge.
- Lower the knee slightly and jump to switch the feet in the air. Land in a bent-knee lunge and repeat.

6. Half Squat Jump



- Stand with arms by the side, feet shoulder-width apart, head up and back straight.
- Squat down until the upper thighs are parallel to the floor, keeping the back straight and chest up.
- Press mainly with the balls of the feet to jump forward and straight up as high as possible, using the thighs like springs.
- Land and immediately squat down to jump forward again.
- Repeat the exercise according to the distance.

7. Tuck Jump



- Stand up straight, with feet wider than shoulder-width apart and the chest up.
- Lower the body and bend the knees, keeping the back straight.
- Jump forward and upward, lifting the knees to the chest.
- Keep the neck in a natural position and align the neck in line with the spine.
- Position the feet and lower the back into the starting position.

8. Jump and Toe Touch

- Perform a vertical jump, bend the body forward to lift both legs off the floor to a horizontal position.
- Legs should be parallel or above the ground and the body should be bent between the trunk and legs. Extend the arms and the hands toward the toes. Land with feet together.

Practising the Skill

- Organise the students into groups of approximately six members each.
- Ensure that the distance between the starting and finishing line is 20 meters.
- Have each group perform the exercises, one group at a time.
- Instruct the groups to complete each exercise for at least 2 repetitions.
- After completing the repetition, the students walk back to the starting line before beginning the next repetition.

Lead up Activity

Organise the students into two equal groups: Group A and Group B. Ensure that the distance between the starting line and finishing line is 10 meters. On command, the first student from each group performs the first exercise and reaches the end line. The same is followed by all the students. After completing the first exercise, the second exercise shall be continued. The group that completes all the exercises first is declared the winner.

4 x 100 m Relay

Objective

- To teach and train the students the proper technique for executing a non-visual baton exchange in a 4x100 m relay.

Teaching the Skill

Teaching Non-Visual Exchange in 4x100 m Relay

Non-Visual Exchange:

Explain that in a non-visual exchange, the outgoing runner does not see the baton being placed into their hand by the incoming runner. Emphasise that this technique is commonly used in 4x100 m relays where four runners each run 100m to complete the race.

The baton passing sequence:

- The first runner carries the baton in the right hand and passes it to the second runner's left hand.
- The second runner passes it to the third runner's right hand.
- The third runner then hands it over to the fourth (anchor) leg's left hand.

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Emphasise the correct handoff technique for each exchange

- Smooth and swift baton transfer without looking.
- Proper hand positioning and timing for successful exchanges.
- Coordination between runners to maintain speed and momentum.

Types of Non-Visual Exchanges:

There are three types of non-visual exchanges;

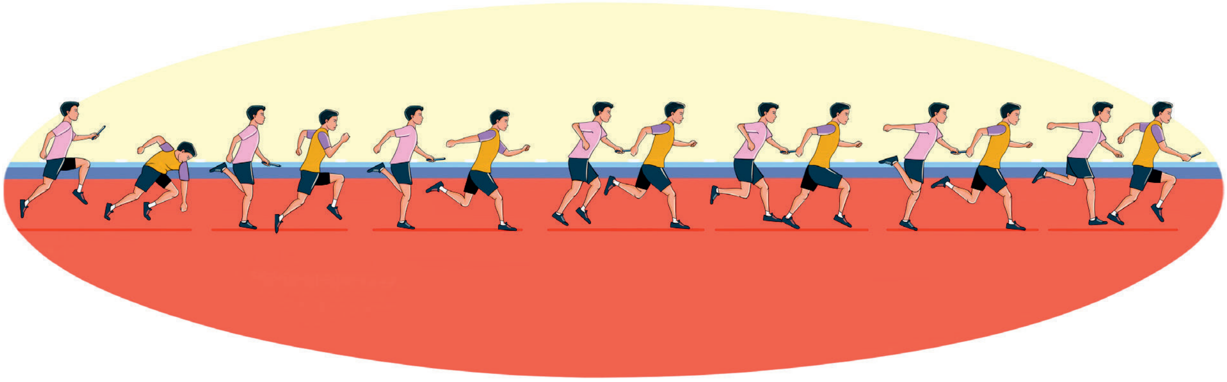
1. Up Sweep
2. Down Sweep
3. Push Pass

Upsweep Technique

- Outgoing runner's hand is extended backward at the hip level.
- Incoming runner moves the baton upwards between the outgoing runner's widely spread thumb and index finger.
- Distance between the runners is 1 metre or less.
- A relatively safe technique
- Observe the outgoing athlete's hand position.
- Ensure that the outgoing athlete has placed the check mark in the correct place.

Practising the Skill

Out-Going Runner Action: The athletes do arm action in a stationary position. When the teacher whistles, everyone should extend their right hand backward.

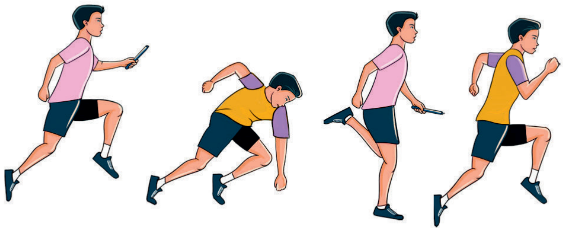


Incoming Runners' Action: The athletes do arm action with a relay baton in a stationary position. When the teacher whistles, all athletes should extend their hand forward with a baton.

Baton Exchange Practice

Arrange them one by one at a distance of 10 metre each.

Organise the students into groups of four.



First athlete

Holds the baton in the right hand and performs the arm action while saying "Go!"

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Second athlete

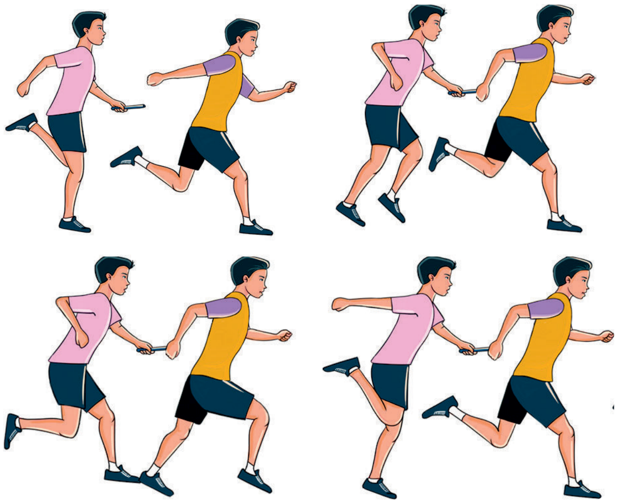
Extends the left hand backward to receive the baton from the first athlete.

Third athlete

Receives the baton from the second athlete and hands it over to the fourth athlete's left hand.

Fourth athlete

Receives the baton from the third athlete and completes the relay race.



Practise Baton Exchange with Different Speeds:

1. **Walking:** Practice the baton exchange while walking at a slow pace.
2. **Jogging:** Practice the baton exchange while jogging at a moderate pace.
3. **Running:** Practice the baton exchange while running at a fast pace.

Fix the Checkmark and practice with Running and Baton Exchange:

- Fix the checkmark on the baton to ensure it is secured in place.
- Practise the baton exchange while running at a fast pace, ensure the checkmark is secure and the baton is transferred smoothly.
- Use the **trial-and-error** method to confirm the checkmark, adjusting it as needed to ensure a secure and smooth baton exchange.

Lead up Activity

Organise the students into groups of four and conduct a 4 × 100 m relay race. The team which finishes at the shortest time is the winner.

High Jump

Scissor Technique

Objective

- To instruct and train the students in the proper form and execution of the scissor technique in high jump.

Teaching the Skill

1. Introduce the Phases of the High Jump:

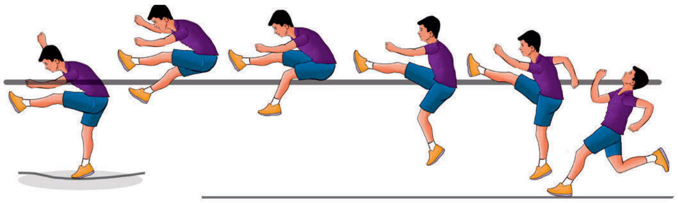
Explain the four main phases of the high jump: approach, take off, flight and landing. Emphasise the importance of each phase and how they work together to execute a successful jump.

2. Teach the Approach:

- Instruct the students to take 7 to 11 steps in a straight line at an approximate 30-degree angle to the bar.
- Explain how to take the last 3 strides carefully and take off the ground.

- Explain that the take-off foot should be the one farther from the crossbar and the inside leg is the free-swinging leg.
- Emphasise a flat-footed take off with the jumper's weight is on the take-off foot.

3. Demonstrate the Scissor Technique:



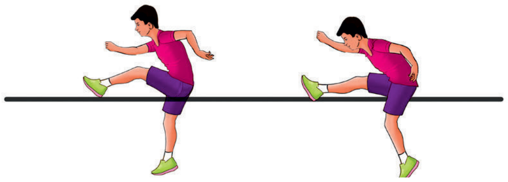
- Demonstrate to students how to swing the inside leg up and over the bar first.
- Cue them to keep the inside shoulder from dropping towards the bar.
- Explain clearing the bar is achieved by lifting the take-off leg over the bar and the swinging leg "scissors" onto the mat.

4. Emphasise the Landing:

- Stress the importance of landing on feet to complete the jump safely, without getting injured.
- Provide feedback and corrections on the landing technique.

Practising the Skill

Finding the Strong Foot: Perform 5 hops on the left leg and 5 hops on the right leg. The leg that covers more distance is the strong leg and therefore is the take-off leg. Start with low-height drills and progressively increase the bar height as students gain skill and confidence. Incorporate approaches and take-off drills to help students develop consistency and rhythm.



Single Step Jump: Start with the less-powerful foot forward. On command, bring the take-off foot forward, jump and clear the bar.

Two Step Jump: Begin with the powerful foot forward. On command, take two steps, bring the take-off foot forward, jump and clear the bar.

Five Stride Jump: Position the less-powerful foot forward. On command, take five steps in a straight line at a 30° angle to the bar. Bring the take-off foot forward, jump and clear the bar.

Fixing the Runway: Practise the same with different run-up lengths, adjusting it through trial and error to find the optimal steps between 7 and 11 steps based on the individual capacity for the high jump. Provide ample opportunities for students to practise the full scissor high jump technique.

Lead-up Activity

To run a successful high jump competition, set up the area carefully with the bar, mat and runway. Students are briefed on rules and safety measures beforehand. They're organised in order, knowing when to jump. Each takes turns jumping higher, from easy jumps and then raising the bar slowly. Points are given for successful jumps. The student who clears the maximum height is declared the winner. All students' efforts are appreciated, building a sense of achievement and unity.

Straddle Techniques

Objective

- The students learn straddle techniques in high jump.

Teaching the Skill

The objective of high jump is to try and jump as high as possible by taking a run-up and jumping over a crossbar. To avoid injury, the landing is on a mat filled with soft synthetic material or sandfilled pit.

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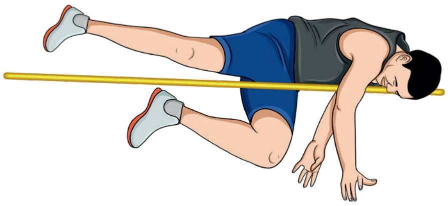
Approach Run

- In the straddle, the athlete should approach the bar from a 20° to 35° angle at maximum controlled speed. Approaching at this angle will allow the high jumper to plant the take-off foot closer to the crossbar.
- The number of strides taken in the approach to the bar should be from 7 to 11.
- The last three steps of the approach should be LONG-LONG-SHORT.
- The shoulder is parallel to the crossbar and the eyes focus on the crossbar. In the normal sprinting action at the final three steps, execute a double arms swing for take-off.

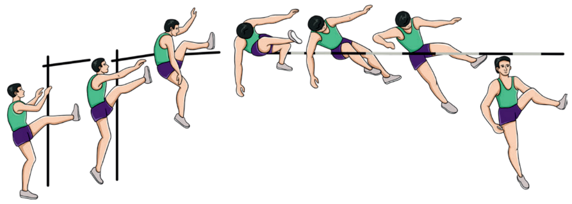
Take-off

- The final stride is shorter than the previous two strides so that the centre of gravity moves back over the take-off foot and thrusts the jumper into the air.
- The foot plant is a heel-ball-toe rocker step.
- The arms swing simultaneously upward in a double arm swing and are blocked out as the hands reach chin level. This provides for greater force on the take-off.
- The swing of the free leg begins bent, with the thigh and knee leading. It is followed by a whip-like action of the foreleg as it straightens before the leg reaches a horizontal position.

Crossbar Clearance

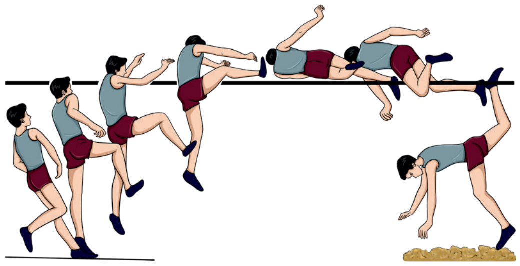


- As the jumper leaves the ground, the swing of the lead leg and the rotation of the take-off foot causes the body to begin rotating around its longitudinal axis.
- After the arms have been clocked out, the right arm continues upward as the left arm stays bent at the elbows and close to the body.



- The lead leg remains straight as it reaches the cross bar height while the take-off leg is brought up, under the crossbar, flexed.
- When the jumper is over the cross bar, the lead leg forcefully extends upward in a counter-clockwise motion, leading with the elbow. This causes an opposite reaction in the trail leg and rises to clear the crossbar.
- The left arm stays close to the body throughout the clearance.

Landing:



- Land safely on the opposite shoulder of the take-off leg and roll on back.

Practising the Skill

1. **Identify the Strong Foot:** Have the athlete perform 5 hops on their left leg and 5 hops on their right leg. The leg that covers more distance is their strong leg and take-off leg.
2. **Single-Step Jump:** On command, bring the take-off foot forward, jump and clear the bar.
3. **Two-Step Jump:** Begin with the power foot forward. On command, take two steps, bring the take-off foot forward, jump and clear the bar.
4. **Five-Stride Jump:** Position the non-power foot forward. On command, take five steps in a straight line at approximately a 30° angle to the bar. Bring the take-off foot forward, jump and clear the bar.

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5. **Adjusting the Runway:** Experiment with different run-up lengths, ranging from 7 to 11 steps, based on the athlete's capacity. Find the optimal run-up distance through trial and error for successful high jumps.

Lead-up Activity

Organise all the students together for the high jump competition. Briefly explain the rules of the high jump competition to all participants. Demonstrate to the students the proper form and technique for the straddle jump. Allow students to practice the straddle technique with guidance and feedback. Begin the high jump competition with each student taking turns to jump. Keep track of each student's successful jumps and the height cleared. Identify the student who clears the highest height as the winner of the competition. Congratulate the winner and acknowledge all participants for their efforts.

Class 7
Unit 4

Tamil Folk Games and Joyful Games

Objective

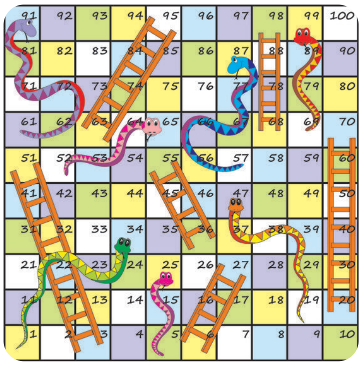
- To ensure students' happiness through Tamil Folk Games and Joyful Games.

Tamil Folk Game

Seval Sandai

Organise the students into two groups. Draw a circle of 2 metres diameter and make the two groups sit around the circle as in the figure. One student from each group should get ready to enter the circle with CAPS on their heads. As soon as the teacher blows the whistle, the two students should step into the circle with one hand folded at their back, chanting “Kokkara or Kokkara” three times. Then both have to snatch the cap from each other's head, simultaneously protecting their own cap with one hand. The opponent wins if the cap is snatched or if the student steps outside the circle while playing. After that, two other players from both teams have to continue the game. The team that scores more points at the end of the specified time is considered the winner.

Paramapadham



Use a square paramapadham diagram.This game can be played by a minimum of two players. The first student rolls the dice and moves the piece according to the number shown on the dice . The number of sides ranges from 1 to 6. When the dice is rolled, if the piece reaches the bottom of the ladder, the piece moves up the ladder. If the same piece reaches the mouth of the snake, it slides down to the tail. All the students play in turns. The piece which reaches the end first is considered as the winner.

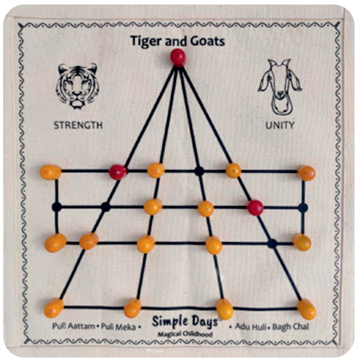
Yeru Thazhuvuthal

Procedure: Draw a playground in the shape of a large circle. Draw from the circle parallel lines of 5 meters on both sides and mark as entrance (wadi vaasal). Organise the students into two groups. Students entering into the circle should keep a long handkerchief tucked behind their waist like a tail. Five students from the opposing team should stand inside the circle. On the teacher's command, the five students with their tails try to enter through the gate. They try to escape and leave the circle from the opposite side of the entrance. At the same time, the opposing team, five students who are inside the circle will try to take the tail of the students who have entered

the circle through the gate. Points are awarded as much as the tails taken by the team. The team that takes more tails than the other team is the winner. Both teams are given an equal chance and the game is continued.

Adu Puli Attam

Draw the Aadu puli attam game diagram as shown in the figure. It will have 23 connection points. 15 Aadu (goat) and 3 puli (tiger) will be involved in this game. The match will be started by flipping a coin by the teacher. The winner of the flip starts the game as the puli. The pieces must be moved only through the connecting points.The puli starts the game with three pieces in its cage. Once the goat lays a piece, the tiger moves its piece. When moving like this, pieces can only be moved from one connecting point to another connecting point. As the moves are made, the pieces can be cut in the middle.



When will the game end?

1. The Tiger wins when the Aadu loses its five pieces.
2. When the tiger is unable to move the pieces, the Aadu is considered as a winner. Students are given equal opportunity to play the game.

Joyful Games

Cycle Wheel Relay

Organise the students into many groups and draw a circle according to the number of students. From its centre towards the circle, draw bicycle spokes- lines at regular intervals such that the number of spokes- lines and number of groups are equal. Form it as a cycle wheel. From the centre of this circle, draw a big circle with a diameter of 2 metre more than the small circle and keep it as a circular running track. Make each team stand one after the other towards the outer circle on each spokes line. When the teacher blows the whistle, the first student in each row should run to their right side. Complete the cycle wheel and touch the second student in their row to make them run in a circle. The runner must go to the end of their team and stand. The touched student should run in the circle. Thus, the game should continue. At the end of the game, the team that runs first is declared the winner and should be congratulated by the other team.

Fish Net

Mark off a goal at each end of the playing area and draw sidelines. Organise the students into two teams, behind each goal. The students at one goal join hands to form the fish net, those behind the other goal are the fish. At the signal "Go" all the students run for the opposite goal and at that time, the fish net tries to catch as many fish as possible by encircling them. The fish cannot break through the net or go under the hands but can escape only through the opening at the ends.

When the net is closed, all who have been captured join the other side. The players go back to their goals and the other side forms the net for the next game. The game continues with each side alternating as fish and net until all the players on one side have been captured.

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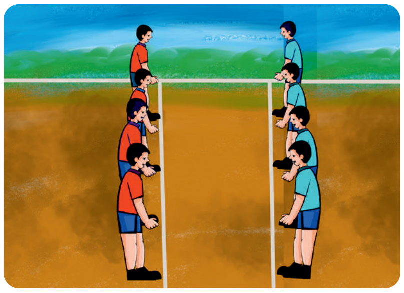
Flowers and the Wind



Organise the students into two teams. One team is named as Flower and the other team as Wind. An arbiter is also nominated. Starting lines are drawn parallel to each other at 2 metre intervals. An end line is drawn on both sides at a distance of 15 metres, from the starting line. Flower team members should name a flower for themselves. (For example, jasmine rose etc.) The name of the flower must be whispered to the arbiter and kept as secret from the wind team. Now, both teams line up against each other at the starting line. The flower team members ask the wind team members to find the names of the flowers. Then the wind team members will call the names of the flowers one by one. When they call the correct name, the flower team has to run towards their end line. Now the wind team chases and catches. The game continues until all the flowers are caught. Then the wind team plays as the flower team and the flower team as the wind team.

Horse riding relay

Organise students into 2 or 4 equal groups, depending on the number of students. Draw a starting line in parallel to the boundary lines at a distance of 10-metre intervals. The students line up one after the other, parallel to each team, behind the starting line. One student from each team goes to the boundary line and stands facing their team. At the command of the teacher, the student standing on the boundary line runs and carries the first student of their team, who is standing opposite, on their back and drops them at the boundary line. The dismounted student runs from the boundary line to the opposite side, carries the next student of their team on their back and drops them at the boundary line. Continue this process until all the students standing at the starting line have been moved completely to the boundary line. The team that finishes first will be the winner.

Don’t Touch The Rider

Students should be assembled within a designated area. A student is chosen to act as the hitter. Following the teacher's whistle, the hitter endeavours to tag the running students. The running students must pair up and simulate horseback riding to shield themselves from being tagged. If the hitter successfully tags a non-rider, the tagged individual assumes the role of the hitter and the game continues.

Kozhi Sandai

Organise the students in pairs of same age and weight. They stand facing each other on a flat surface. Each pair should stand on one leg, keeping the other leg bent and off the ground. The objective is to push the partner off the balance with the shoulder while maintaining one's own balance. The students who lose their balance or put their other foot on the ground lose the game. The students who stands with balance till the end of the game is the winner.

Run With The Partner

Group the students into teams of equal size. Teams line up in a straight line, with the first student in each line standing a few feet away from the rest of the team. Place a cone or marker at a short distance from the first student in each line. Once the teams are ready, start the race by signalling the first person in each line to begin. The first student in each line should run towards the cone, touch it and return to their team. Once they reach their team, they should hold hands with the next person in line and continue running towards the cone. This process should continue until all team members have completed the race. The team that finishes first is the winner.

Class 7
Unit 5

Sports Tournaments and Schemes

Objective

- Identify various career opportunities in the area given such as career perspectives, funds and so on.

Major Extramural Competitions in School Level

Zonal Level Competitions (RDS/RDG/BDG)

- Each district is divided into several zones based on school strength. The competition conducted between schools within a zone is called zonal level competition.

Revenue District Level Competitions (RDS/RDG/BDG)

- The competition between the winners of zonal level competitions from various zones in the district is called revenue district level competition.

State Level Competitions (RDS/RDG/BDG)

- The competition between the winners of revenue district level competitions from various districts in the state is called state level competition.

National Level (SGFI)

The School Games Federation of India (SGFI), an autonomous body under the Ministry of Education, conducts national level sports competitions exclusively for school students in India. It organises various sports and games competitions annually. Talented students selected by state school authorities can represent their state team in SGFI.

Sports Development Authority of Tamil Nadu (SDAT)

SDAT was established in 1992 to promote sports among the masses and achieve excellence at national and international levels. Its role is to promote sports and physical fitness throughout Tamil Nadu. The Hon'ble Chief Minister of Tamil Nadu is the President of SDAT.

Sports Scholarship (Prize Money to Medal Winners)

- For the National Medal Winners of National School Championship for various games conducted by SGFI/Kaelo India Youth Games (held annually). SDAT provides high cash incentives for competitive specific performance. The high cash incentives are Rs.2,00,000/- for Gold Medalists, Rs.1,50,000/- for Silver Medalists and Rs.1,00,000/- for Bronze Medalists along with Certificates and Form-IV for all other participants.

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Class 7
Unit 6

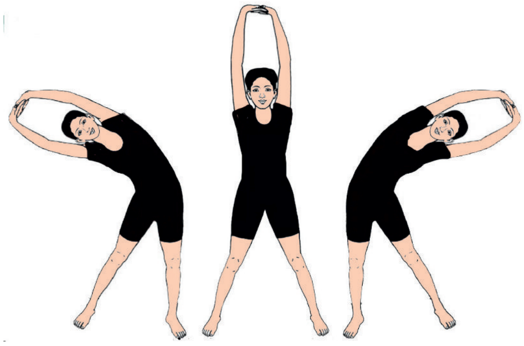
Asanas and Breathing Techniques

Asanas

Objective

- To enhance physical development, flexibility and mental relaxation through Asanas and Breathing techniques.

Hasdothasana



Posture : Bending Sideways
Position : Standing position

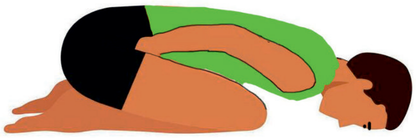
Procedure:

Count 1: Stand upright with both feet together.
Count 2. While inhaling slowly, raise both arms above the head by the sides, interlocking fingers of both hands and turn the palms facing upwards.
Count 3. Bend the hips to the right while exhaling. Continue in this position for 20 seconds.
Count 4. Inhale and come to count 2.
Count 5. Lower both arms to the sides and return to the starting position. Do the same on the left side.

Benefits:

- Spinal cord also increases its flexibility.
- This asana helps to dissolve excess fats in the sides.

Mandukasana



Posture : Frog Pose
Position : Sitting position

Procedure:

Count 1: Sit in Vajrasana position.
Count 2: Fold the thumbs and hold them with the other fingers and press them close to the navel.
Count 3: Exhale slowly and bend the pelvis forward so that the chest touches the thigh. In this position, the head should be raised and looked forward. Remain in this position for 5-10 seconds.
Count 4: Inhale and return to count – 2.
Count 5: Back to the starting stage.

Benefits:

It is very useful for people suffering from constipation, diabetes and digestive disorders.

Uruthva Khukuttasana

1. Place the head on the floor and take a deep, calming breath.
2. When the mind is calm, exhale and extend the legs straight in front.
3. Inhale to form an L shape, then exhale.
4. Next, inhale and press the legs up into Tripod Headstand, exhale to maintain a calm mind.
5. Inhale again, moving the left leg slightly backward, then exhale while bringing the right leg into Half Lotus.

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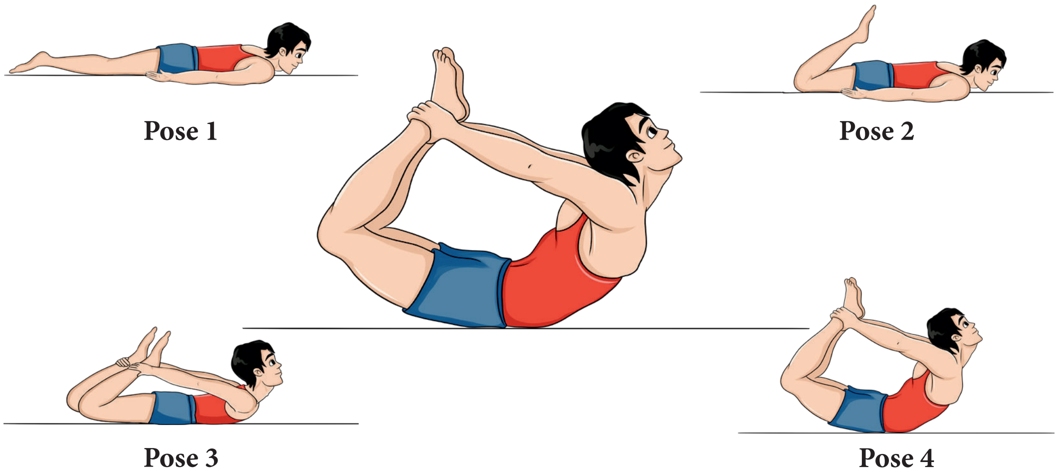
6. Exhale when folding the other leg into Padmasana. Wait until the mind is calm, then inhale and draw the belly in.
7. Exhale and slowly lower the legs, aiming to place the knees inside the armpits or on the triceps. Calm the mind throughout this movement.
8. Push the body weight backward.
9. Lift the head from the floor slowly. (This may take time, so don't rush it).
10. Finally, inhale while fully extending the arms, engage the core, look forward and smile.

Dhanurasana (A bow pose)

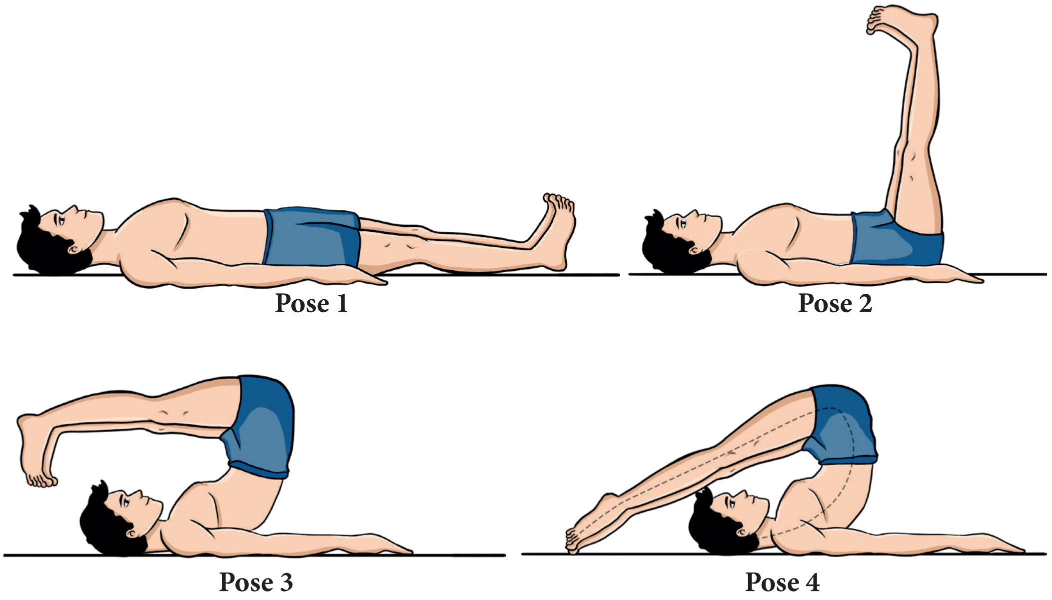


Starting Position: Lie in prone position, stretching both hands above the head and the palms touching the floor. The whole body is in a straight line.

- Exhale and bend the knees forward and hold the feet or ankle by the hands.
- Inhale deeply and hold the breath and raise the head, chest and thighs as much as possible.
- The spine is arched backwards like a bow. Face the sky by extending the neck.
- Maintain this position for appropriately 10 to 15 seconds.
- Return to the starting position.

Halasana (A plough pose)

Starting Position: Lie in supine position with the head and feet in a straight line.



- Raise the legs to a 90° position. Keep the arms sidewards.
- Raise the legs and the trunk, taking support of the arms and the elbows. Keep the elbows parallel to the ground and stretch legs inwards parallel to the ground.
- Bring the legs further beyond the head to touch the ground with the toes.
- Maintain this position appropriately for 10 to 15 seconds.
- Come back to the starting position slowly.

Breathing Techniques

Chandra Kalai

Chandra Kalai, technique used to cool the body and calm the mind.

1. Sit or lie down comfortably.
2. Close eyes and take deep breaths to relax.
3. Close right nostril, breathe in through left nostril.
4. Pause briefly at the top of inhale.
5. Release right nostril, close left, exhale through right.
6. Keep alternating nostrils, inhaling left, exhaling right.
7. Keep a slow, controlled rhythm.
8. Aim for a few minutes daily.
9. Cools body, calms mind, balances energy.
10. Return to natural breathing and notice how feel.

Chandra Kalai brings calmness and balance. Practise it regularly for full benefits.

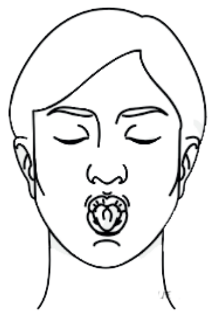
Surya Kalai

Surya Kalai is a yogic breathing technique, also known as "Right Nostril Breathing" or "Solar Breath." In this practice, predominantly breathe through the right nostril while closing off the left nostril

1. Use right hand to control nostrils.
2. Use ring finger or thumb to close left nostril.
3. Breathe slowly through right nostril.
4. Pause briefly without strain.
5. Release left nostril, exhale through it.
6. Inhale right, exhale left and continue.
7. Return to natural breathing.

Sheetkari Breathing Technique

Sheetkari is a yogic breathing technique that involves inhaling through the rolled tongue. The word "Sheetkari" is derived from the Sanskrit words "Sheet" meaning "cold" or "cool" and "Kari" meaning "maker" or "producer." Therefore, Sheetkari Breathing Technique is often referred to as "The Cooling Breath" or "Hissing Breath."



1. Open mouth slightly, curl tongue touching edges of palate.
2. Breathe slowly through the curled tongue.
3. After inhaling fully, shut mouth.
4. Breathe out gently through nose.

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Sheetali Breathing Technique

Sheetali is a yogic breathing technique that involves inhaling air through a rolled tongue or a slightly open mouth. The word "Sheetali" is derived from the Sanskrit word "Sheetal," which means "cooling" or "calming." Therefore, Sheetali breathing technique is often referred to as "The Cooling Breath" or "Hissing Breath."

1. Roll tongue or place it against front teeth.
2. Breathe slowly through mouth, feeling the cool air.
3. Hold breath briefly at the top of inhale.
4. Close mouth and breathe out gently through nose.

Class 7
Unit 7

Sports Injuries, First Aid and Safety Education

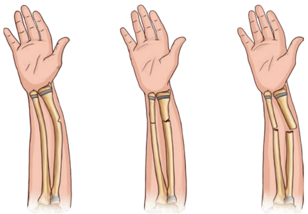
Objectives

- To know more about sports injuries and its classification.
- To create an awareness related to safety measures.

Major Injuries

Introduction: Major injuries in sports can be devastating, often resulting in long recovery times and sometimes even permanent damage. These injuries include fractures, ligament tears, dislocations and muscle strains. Major injuries refer to significant physical harm or trauma to the body that can result in severe impairment, disability or even death.

Simple Fracture (Greenstick Fracture)



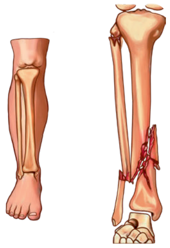
An incomplete fracture, also known as a greenstick fracture, is a type of bone fracture where the bone is bent but not completely broken. This type of fracture commonly occurs in children.

Cause: This can occur due to a fall or a blow.

Symptoms: In an incomplete fracture, the bone may crack on one side while remaining intact on the other side or it may only partially break through.

Treatment: Typically involves immobilising the affected limb with a cast or splint.

Multiple Fracture:



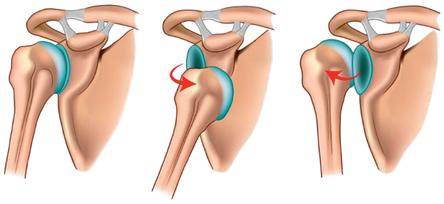
A multiple fracture refers to a break in a bone where the entire bone is separated into two or more distinct pieces.

Causes: This can occur due to trauma, such as a fall or direct blow to the bone.

Treatment: Typically involves immobilisation of the affected limb using casts, splints, or surgical intervention to realign and stabilise the fracture.

Joint dislocation:

A joint dislocation occurs when the bone or bones that form a joint are forced out of their normal position.



Causes: Dislocations can occur in any joint in the body but are most common in the shoulder, fingers, knee and hip joints.

Symptoms: A joint dislocation may include:

- Severe pain
- Swelling and bruising

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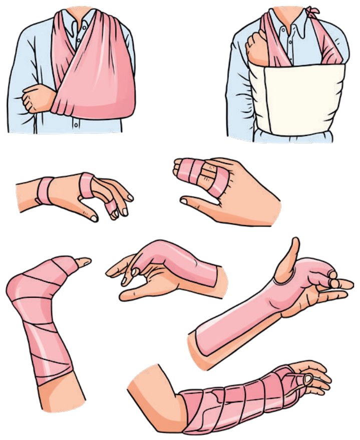
- Deformity or misalignment of the joint
- Inability to move the joint
- Numbness or tingling in the affected area

First Aid

Splint: In sports, a splint is a supportive device used to immobilise and protect an injured body part, such as a finger, hand, wrist, or ankle.

1. Gather Materials:
- Rigid object for the splint.
- Soft material for padding.
- Fastening material.

2. Prepare the Limb:



- Check for any open wounds or bleeding. If present, address them first.
- Carefully remove any clothing around the injured area.
- Support the limb in its current position to minimise further pain or damage.

3. Apply Padding:
- Soft padding around the injured area to provide comfort and protection. Ensure the padding is thick enough to cushion the limb but not too tight to restrict blood.

4. Apply Splint:
- Position the rigid object alongside the limb, providing support along its length.
- Make sure the splint extends beyond the joints above and below the injury for stability.
- Secure the splint in place using fastening material. Wrap it firmly but not too tightly, allowing for some movement and circulation.

5. Check Blood Circulation and Sensation:
- Regularly assess the injured limb for signs of impaired circulation, such as numbness, tingling or discolouration.
- Loosen the splint if necessary to restore proper blood flow.

6. Seek Medical Assistance:
- Even if the splint appears to be effective, it is essential to seek professional medical care as soon as possible.
- Transportation to a medical facility should be arranged promptly, especially for serious injuries.

Safety Education

Sport specific techniques for safety

1. Football (Soccer):
- **Proper Heading Technique:** Keep the eyes on the ball, use the forehead and keep the neck muscles relaxed to reduce the risk of head and neck injuries.
- **Slide Tackling:** Aim to make contact with the ball and avoid sliding.

2. Basketball:
- **Landing Technique:** Bend the knees when landing after a jump to reduce impact on the joints and prevent injuries like ankle sprains.
- **Boxing Out:** Use the body to create space when rebounding to avoid collisions and potential injuries.

Adhering to rules for safety:

- Wear protective gear.
- Follow instructions carefully.
- Keep the work area clean.
- Report hazards immediately.
- Take breaks when needed.
- Use tools correctly.
- Stay focused and alert.
- Never rush tasks.
- Communicate with team members.
- Always prioritise safety.

Activities :

1. Interactive First Aid Quiz:

- Create a quiz with questions related to basic first aid procedures and safety measures.
- Use a combination of multiple-choice, true/false and fill-in-the-blank questions.
- Allow students to work individually or in teams to answer the questions.

2. Safety Skits:

- Have students to work in small groups to create short skits that demonstrate safety practices during sports activities.
- Encourage creativity and humour while conveying important safety messages.
- After each skit, discuss key safety points with the class.

3. Obstacle Course Safety Challenge:

- Set up an obstacle course that includes common sports-related hazards (e.g., uneven terrain, obstacles to jump over, etc.).
- Instruct students to navigate the course while demonstrating safe practices such as proper warm-up, avoiding collisions and using equipment correctly.
- Provide feedback and guidance as they complete the course.

Annexure

Boxing

History

Boxing is a combat sport also known as pugilism, in which two people engage in a contest using only their fists. Marquess of Queensberry framed the rules of modern boxing. There are two forms of boxing: amateur and professional.

The International Amateur Boxing Federation (FIBA) was started 1920. In 1946, FIBA was dissolved and the current governing body of boxing at International level is the International Boxing Association (AIBA). Indian Boxing Federation was started in 1925.

The first boxing competition at the Olympic Games of modern times was the 1904 edition in St-Louis (USA) with bouts in seven weight divisions.

During the game if a boxer is "down" and fails to resume boxing within ten counts then the boxer is termed to be a loser and the opponent shall be declared the winner by Knock-Out.

The Ring

The size of the ring should be 6.10 m (20') square inside the line of ropes. The height of the ring should be 100 cm (3.3') from the ground.

Platform

The platform shall be safely constructed, levelled and free from any obstructing projections. For AIBA Approved Events, the platform should be 7.80 m squared (25.6 feet) For other events, the minimum size of the platform should be 5.82 m squared (19.1 feet) and the maximum size – 7.80m squared (25.6 feet).

Corner Pads

The corner pads should be arranged in the following way: In the near left-side corner facing the Chairperson of the Competition Jury – red; in the far left side corner - white; in the far right-side corner - blue; and in the near right-side corner - white.

The Ropes

All AIBA Approved Events should have 4 separate ropes on each side of the ring. They should be 4cm thick, without considering the cover.

The height of the 4 ropes shall be 40.6cm (16 inches), 71.1cm (28 inches), 101.6cm (40 inches) and 132.1cm (52 inches) from the canvas.

Steps

The ring shall be provided with three sets of steps. Two sets of steps at the opposite corners for the use of the Boxers and Seconds and one set of steps in the neutral corner for the use of the Referees and Doctors.

Gloves

Boxing gloves should weigh 284 grams (approx. 10 oz). For below 67 kg category boxers, the weight of the gloves is 227 grams.

Bandages

For the safety of the small bones, boxers should wrap 2.5m long and 5 cm width bandages on their hands to cover the knuckles.

Duration and Number of Rounds

In all AIBA Elite Men and Youth Boys competitions, the bouts will consist of three rounds of three minutes each.

In all AIBA Elite Women and Youth Girls competitions, the bouts will consist of four rounds of two minutes each.

In all AIBA Junior Boys and Girls competitions, the bouts will consist of three rounds of two minutes each.

For all above listed events, the rest time between rounds is one minute.

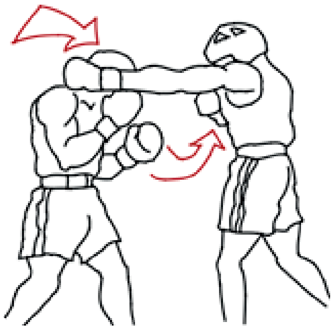
Offensive Techniques

Types of Punches

- Straight Punch
- Hook Punch

The Left Jab Punch

The left jab punch moves straight to the opponent's face. This punch is used as a lead punch and helps to create openings to follow on with other punches.



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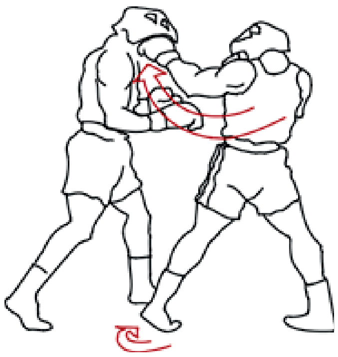
The Right Jab (Right Straight)

The right jab has to move the right shoulder forward for the punch to be more effective with force compared to the left jab.



Hook Punch

The Left Hook / Right Hook

It is a punch that can generate a lot of power and increase the chance of a knock down the opponent.

The Right Hook

Boxer uses the opposite arm and leg to execute the right hook.

Footwork

Footwork is important to enable the boxer to defend or attack from a balanced position. Fast movements are necessary to keep balance and ensure accuracy in punching.

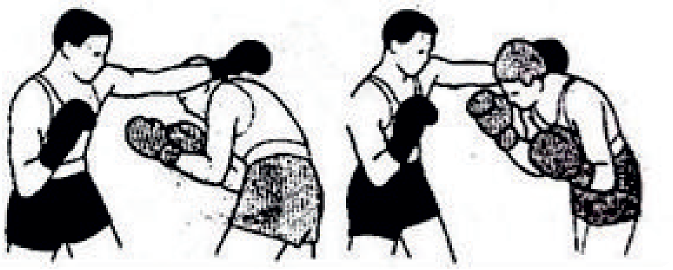
Defensive Techniques

There are lot of defensive techniques in boxing. But at school level, it is advised to teach easy defensive techniques:

- Blocking
- Slipping
- Parrying

Blocking

A straight jab is the punch used most often in boxing, so it is essential to know how to defend against that punch.



Slipping

Slipping is the art of defending against a punch by moving slightly out of the way instead of blocking it.

Parrying

Parrying is a superior defensive move that uses the opponent's momentum against him.

Weight-in

All the contestants should be weighed down on the morning of the competition and undergo a medical examination. The contestants will be categorised according to their weight.

Draws

The draw will take place after the weigh-in and medical examination. A draw should be made so that when a boxer enters a second round other should have completed the first round.

Rounds

Seniors & Juniors: There will be four rounds of 2 minutes each and a 1 minute interval between rounds.

Sub Juniors & Women: There will be three rounds of 2 minutes each and a 1 minute interval between rounds.

Decisions

Win on points

At the end of a contest, the boxer who had been awarded more points shall be declared the winner. If both boxers are injured and continue the contest, the boxer who was leading on points up to its termination shall be declared the winner.

Win by retirement

If a boxer, in the opinion of the referee, is being outclassed or unfit to continue due to injury, the bout shall be stopped and his opponent shall be declared as winner.

Win by Disqualification

If a boxer is disqualified by the referee, the opponent will be declared the winner.

Win by Knock Out

If a boxer is down and fails to resume boxing within 10 seconds, his opponent will be declared the winner by knock out.

No contest

A bout may be terminated by the referee for damage of boxing ring, failure of light supply, weather condition and the bout should be declared 'no contest'. The jury shall decide the necessary further action.

Win by Walk Over

When a boxer presents himself in the ring and his opponent fails to appear after the name has been called out on the mike and within 3 minutes, the referee shall declare the present boxer the winner by a walk-over.

Draw

When the judges had awarded equal number of points for both boxer the contest will result in a draw.

Awarding of Points

Scoring hits

During each round, a judge shall assess the number of correct hits obtained by each.

Correct hit

Each hit without being blocked or guarded must land directly with the knuckle part of the closed glove or either hand on any part of the head or body above the belt.

Points

1 point will be given for 3 correct hits. When a referee warns the boxer 1 point will be awarded to his opponent.

The boxer who has scored more number of points at the end of each bout, 20 points will be awarded. If both boxers have equal points, twenty points will be awarded to both of them.

The boxer who has scored more points at the end of the contest should be declared the winner.

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Class 8

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Class 8
Unit 1

Physical Literacy

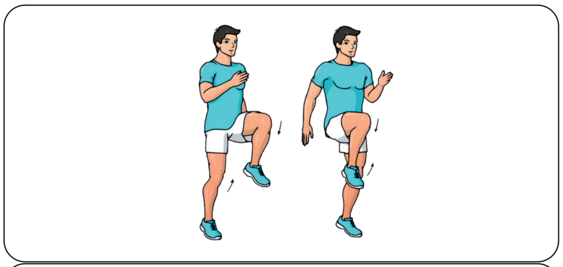
Agility, Balance and Coordination

Objectives

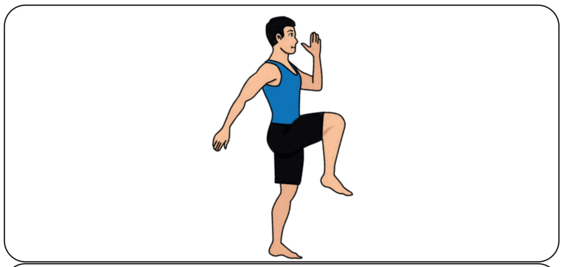
- To teach and develop students in the fundamental skills of agility, balance and coordination (ABC) through structured drill practice.

Teaching ABC Technique in Running

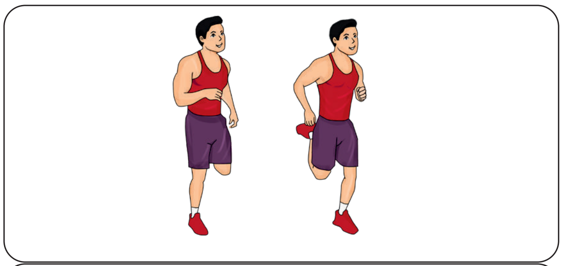
1. **Ankling Drill:** The ankling drill aids in proper loading and spring during running at the toe. So that the heel barely touches the ground. It might be challenging at first, so start slowly, then increase speed.



Ankling Drill



High knees Run



Butt kick Run

Straight leg Run

2. **High knees Run:** Pull knees up with a high step frequency. At the highest point, the thigh and upper body form a right angle. The foot touches down exclusively via the forefoot, i.e., the ball of the foot. Arm movement supports leg movement.
3. **Butt kick Run:** Push off powerfully, actively pulling the heel to the bum, with the bent knee pointing downwards. The arms join the movement at a right angle, while the upper body stays straight or slightly leans forward.
4. **Straight leg Run :** Keep legs straight and land on the toes and pop off.
5. **Leg Cycling Run :** Run forward by focusing on pulling the foot over the mid shin with each stride. Hold the toes up and increase speed and stride length, focusing on pulling the heel from the rear of the body to the front.
6. **Speed Bounding:** For each step, make sure to pull toes towards the shins to bring foot forward. This action, called dorsiflexion, helps engage muscles when foot hits the ground. Instead of pushing off with toes, focus on bringing leg back to its starting position. This movement is repeated in the second phase of the drill.

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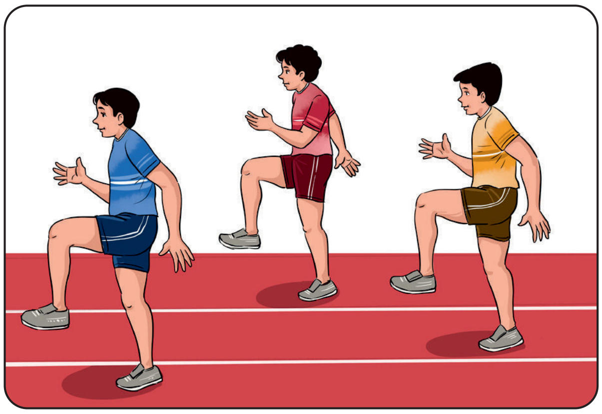
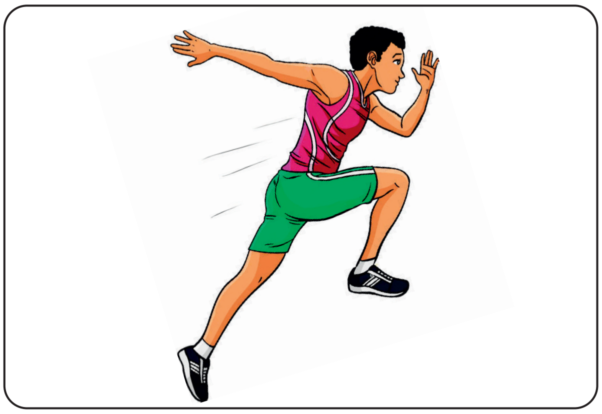
7. **Cross-Overs:** Cross right foot over the left, turning hip to the left. Then, bring left foot forward, stepping in front of the right. Repeat this movement for five steps, then reverse.
   Arm Position: Keep arms extended and parallel to the floor as they move.
8. **Hip Movement:** Let hips move naturally with each step, but keep upper body steady without rotating.

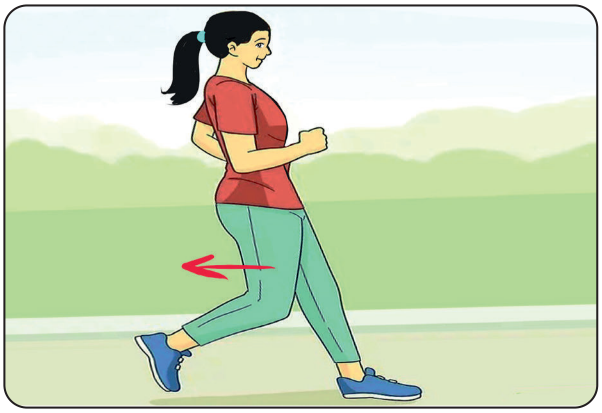


Leg Cycling Run



Speed Bounding

Cross-Overs



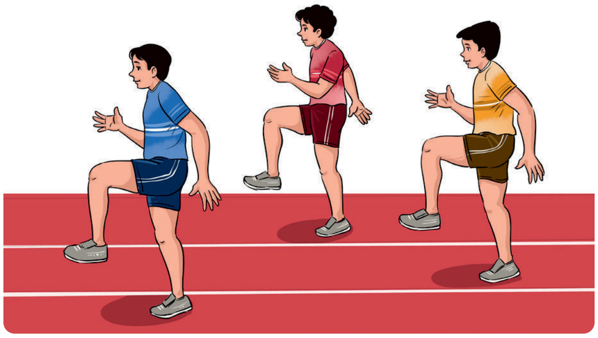
Running Backwards

9. **Running backwards:** Running backwards demands close attention to movements. Start with a slow backward walk and short steps or pick up the pace with longer strides. Keep the upper body and hips straight, letting the arms follow the motion. This activity works the calf muscles and helps enhance motor skills.

Practising the Skill

Organise the students into groups of approximately six each. The distance between the starting and finishing lines should be 20 metres. Perform each exercise group by group.

Each exercise should be done at least twice. After completing each repetition, walk back to the starting line.



Lead-up Activity

High Knee Relay

Group the students into two equal groups and name them A and B. The distance between the starting line and the finishing line is 10 metres. Make the groups

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stand at the starting line. On command, the first student in each group performs the exercise and returns to the starting line and touches the next student and joins from behind. The second student continues the same exercises. This continues until the last student completes all the exercises. The group that completes the exercises first wins.

ABC for Thrower

Objectives

- To enable the students to understand and apply the ABC technique (Arm, Body, Core) to improve their throwing performance.

Teaching the Skill

ABC technique and its components:

- **Arm:** Proper arm mechanics, including release point and follow-through.
- **Body:** Correct body alignment and position for power and accuracy.
- **Core:** Engagement of core muscles for stability and energy transfer during the throw.

Teaching the Fundamental Skills

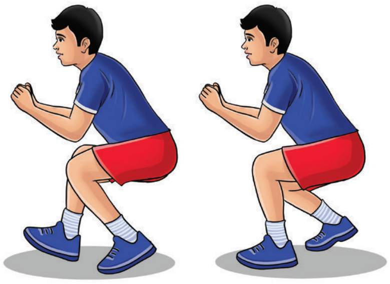
1. Standing - Split

- Stand with one leg resting, laces down, facing away from it.
- Squat down with the standing leg until the knee of the other leg nearly touches the floor.
- Push up through the front foot and return to the starting position.

2. Crocodile walk

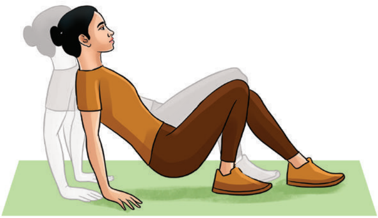
- Start in a push-up position with legs and arms shoulder-width apart.
- Lower the body as in a push-up (Bring right leg to the left knee).
- Keep the upper body low, engaging core and glutes for proper posture.
- Alternately bring one knee towards the elbow while moving the opposite arm forward, then switch sides. (Like Crocodile walk)

3. Half Squat Walk



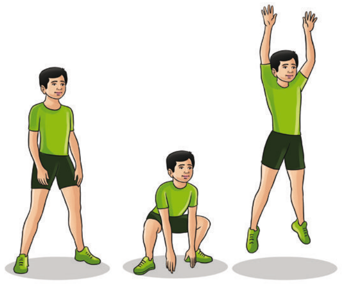
- Stand with feet shoulder-width apart.
- Get into squat position and stay low to walk forward.

4. Crab walk



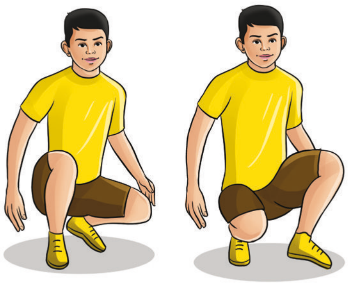
- Sit on the floor feet flat and knees bent. Place palms flat on the floor behind the hips. Lift hips off the ground, engaging core.
- Move the left hand forward a few inches while straightening the right leg in front. Tap the heel to the floor, then return to the starting position.
- Repeat the same movement on the other side, moving the right hand forward and straightening the left leg.

5. Frog Jump



- Start in a squat position with the hands on the floor in front of the feet.
- Jump forward a short distance, landing on the hands and feet at the same time.
- The hands and feet help absorb the landing impact to prevent strain on the knees.
- This is different from a Rabbit jump, which focuses more on height than distance.

6. Duck Walk



- Sit in a full squat position.
- Heels are to be kept raised so that the weight of the body gets balanced on the toes.
- Walk forward in the squat position with the back upright and heels raised.

7. Alternate Leg Split

- Start with feet together, then take a significant step out to one side while keeping the chest upright.
- Lower into the lunge until the thigh is nearly parallel to the floor.
- Hold for a few seconds before pushing off that leg and return to the starting position. Repeat the same for the other leg.

8. Partners Wheelbarrow Walk

- Students are grouped in pairs
- Start in a high plank position with hands under shoulders.
- The student lifts and holds the ankle of his partner, keeping the body straight and looking ahead.
- Move the right hand forward for a specific distance.
- Then move the left hand past the right, maintaining a steady pace to avoid falling.
- Engage core and glutes for maximum movement.
- Follow the distance in the training plan, then switch with the partner.

Practising the Skill

- Demonstrate the correct form and technique for each exercise to maintain proper posture and movement.
- Organise the students into groups of eight.
- The distance between the starting and finishing line is 20 metres.
- Students are instructed to perform the exercises in sequence.
- Each exercise is repeated at least 2 times.
- Instruct students to return to the starting line after each repetition.
- Supervise the group practise and correct the mistakes.
- Take turns to repeat the exercises for equal participation.

Lead-up Activity

Organise the students into two equal groups: Group A and Group B. The distance between the starting line and the finishing line is 10 metres. Upon command, the first student from each group will perform the first exercise and reach the endline. Then the next student continues.This goes on until the last student completes the exercise. The group that completes the exercise first will be declared the winner. In the same way, competition can be conducted with all the exercises too.

Class 8 Unit 2

Physical Development

Calisthenic Exercises

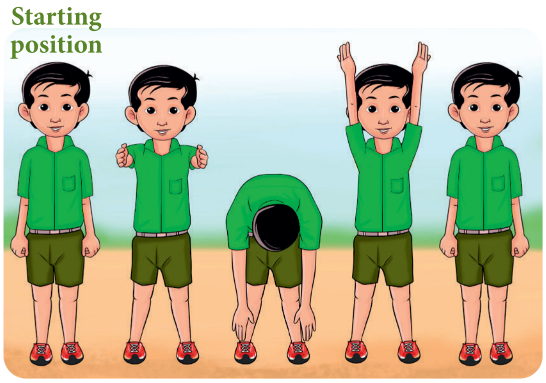
Objectives

- To develop physical fitness, rhythmic coordination and cultural appreciation through Calisthenic exercises, Lezium exercises and Tamil Folk Games.

Starting position: Stand with feet slightly apart.

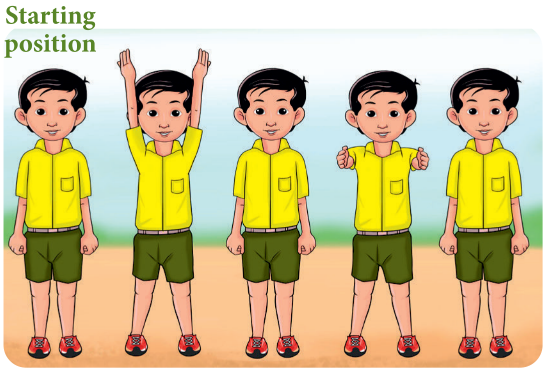
Exercise – 1

1. Jump, spread feet apart and bring arms forward to shoulder level while landing.
2. Bend forward and touch the ankle.
3. Same as count 1
4. Jump back to the starting position.



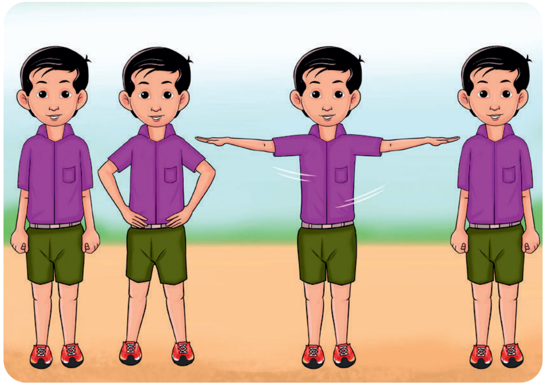
Exercise – 2

1. Jump, spread feet apart and raise arms sideward to shoulder level while landing.
2. Jump, bring feet together and clap over the head.
3. Same as count 1.
4. Jump back to the starting position.



Exercise – 3

1. Move the left leg one step to the left side and keep the hands on the hip.
2. Raise the arms sideward to shoulder level.
3. Same as count 1
4. Back to the starting position. (Do the same exercise on the right side as well.)



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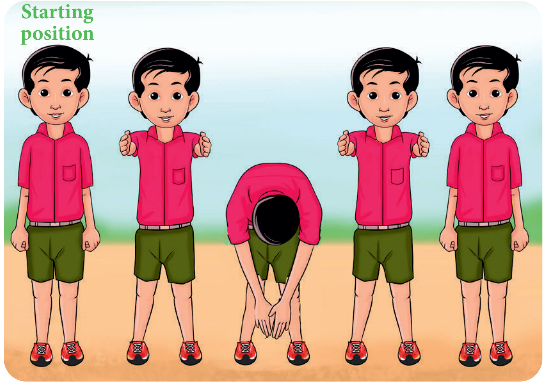
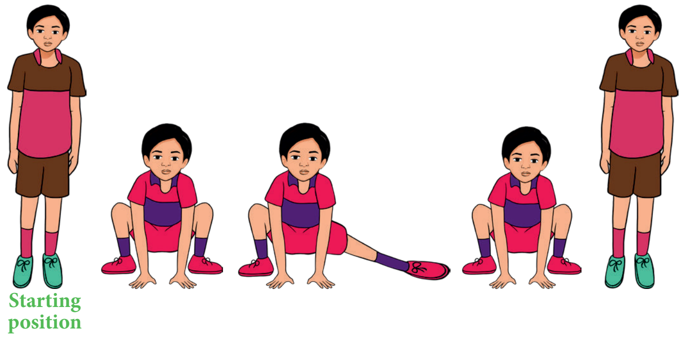
Exercise – 4

1. Jump, spread feet apart and bring arms forward to shoulder level while landing.
2. Bend forward and clap.
3. Same as count 1
4. Jump back to the starting position. (Repeat the exercise for 16 counts)



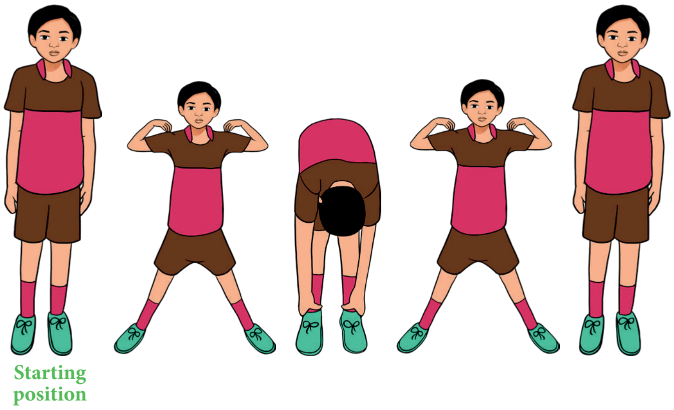
Exercise – 5

1. Jump, spread legs apart and sit in a squat position, placing the hands on the ground between the knees.
2. Support the body weight on hands and stretch the left leg to the left side.
3. Same as count 1.
4. Jump back to the starting position. (Do the same exercise for right leg too)



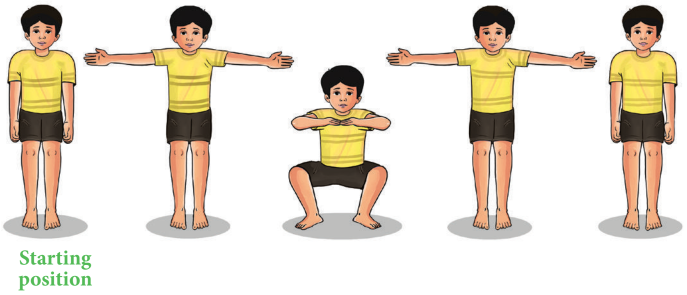
Exercise – 6

1. Jump spread legs apart, bend the arms sidewards and touch the shoulders.
2. Bend forward and hold the ankles with hands.
3. Same as count 1.
4. Jump back to the starting position.



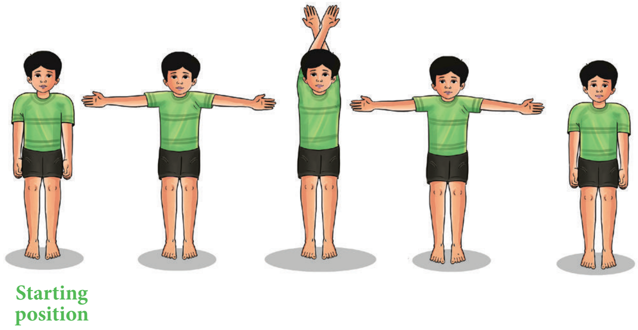
Exercise – 7

1. Raise the heels, raise the arms sideward to the shoulder level, facing palms downwards.
2. Sit in a half squat position and bend the elbows close to the chest so that the tips of the middle fingers touch each other.
3. Same as count 1.
4. Back to the starting position.



Exercise – 8

1. Feet apart, jump, raise the arm sideward to shoulder level, palms facing upwards.
2. Raise the arms above the head. The arms are crossed diagonally without bending the elbows.
3. Same as count 1.
4. Back to the starting position.



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Light Apparatus Exercises

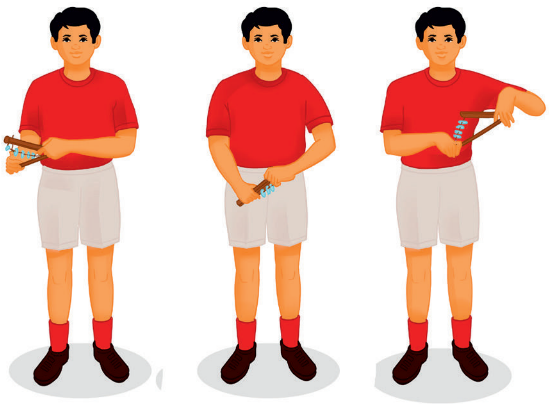
Lezium Exercises

Starting position: Hold the longer handle of the lezium in a horizontal position with the left hand and hold the shorter handle with the right hand.

Keep the lezium near the right hip with a longer grip parallel to the ground and the shorter handle below and crossed with the longer handle.

Exercise – 1: Two Count

1. Pull the small rod down with the right hand.
2. Tap the small rod with the longer rod.
3. Repeat the same for 16 counts.



Exercise – 2: Four Count

1. Pull the small rod and bring the lezium to the left side near the left hip.
2. Raise the lezium little on the left side and tap the small rod with the longer handle.
3. Pull the small rod and bring the lezium near the right hip and tap the small rod with the long handle.
4. Repeat the same for 16 counts.

Kolattam

Exercise - 1

Starting position: Even number of students stand in the circle. Each student should have two kolattam sticks in their hands.

Position: Students turn to their right while standing in the circle.

- Count 1, 2 - Students move their right leg forward and tap the sticks once downward, upward and then near the left hip
- Count 3, 4 - Students move their left leg forward and tap the sticks once downward and once upward near the right hip.
- Count 5, 6 - Students move right leg forward and tap the sticks once forward and once backward above the head.
- Count 7, 8 - Students join their left leg with right leg and tap the sticks once downward and once upward near the waist.

Exercise - 2

Position: Students stand in pairs facing each other in the circle.

- Count 1, 2 - Tap the sticks once downward and once upward near the left hip.
- Count 3, 4 - Tap the sticks downward once and upward once near the right hip.
- Count 5, 6 - Partners raise their left hand and tap the sticks in the left-hand.
- Count 7, 8 - Tap the sticks in front of the waist once downward and once upward.

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Indigenous Exercises

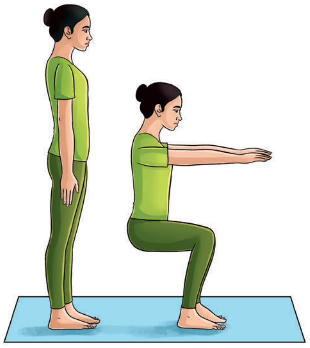
Scorpion Dand

Starting position : Take a full squat position, then keep both palms on the ground and stretch the legs back as far as possible. Body weight is supported on the hands. Hands are straightened.

- Flex the elbows and bring the body parallel to the ground and raise the left leg upward. Turn the face to the right side.
- Return to the starting position.
- Flex the elbows and bring the body parallel to the ground and raise the right leg. Turn the face to the left side.
- Return to the starting position and repeat the dand.

Baithak

Chair Baithak



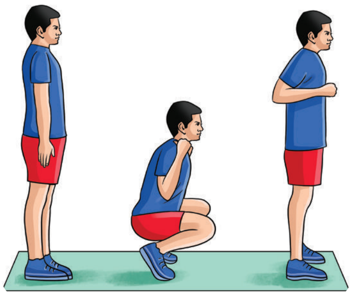
Starting position : Start this baithak from a standing position.

- Sit in a half squat (as if sitting in a chair) with knees half bent.
- Stretch the arms forward and clasp the fingers with palms facing outward.
- Turn clasped fingers straight to the chest.
- Back to the starting position.

Standing Baithak

Starting Position : Stand up straight with feet apart and closed fingers.

Procedure



- From the starting position, jump with both legs and land slightly away from where the student just jumped.
- Sit in a squat position, elbows bent and thumbs resting on the shoulders.
- Balance on toes. Keep the body straight and the legs stiff, support the entire body weight on the toes.
- Jump back to the starting position.

Class 8 Unit 3

Sports Education

Hockey

Objectives

- To develop passing and receiving skills in the game of hockey.

Teaching the Skill

Passing and receiving skills in hockey is essential for players to move the ball effectively and maintain possession of the ball. Coordination, accuracy and teamwork are important to develop these skills.

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Passing & Receiving skill

Passing the ball (For the right-handed player)

Grip: For the right-handed player, the left hand should be at the top of the stick and right hand half-way down the handle.

- Place the ball on the right side of the body and stick close to the ball or in contact.
- Low posture, perpendicular to the target with the left leg forward.
- Push the ball forward with the head of the stick.

Push pass: Place the ball in line with the back foot to attain more power in passing.

Receiving the ball

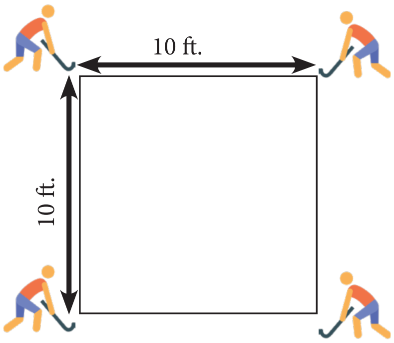
Grip: Left hand on top, right hand further down the stick while passing.

- Move the foot towards the line of the ball.
- Place the stick on the ground to receive the ball.
- Move back the right hand along with the stick to absorb the ball.

Practising the Skill

Passing and receiving skills in hockey are essential for players to move the ball effectively and maintain possession.

Activity 1



Passing :

- Students are asked to stand in a square shape (measuring 10 feet) as shown in the figure.
- Students do the passing, clockwise to one another, 5 to 10 times.
- Then, they change the direction and practise passing.

Variation: Increase the number of balls for further practise.

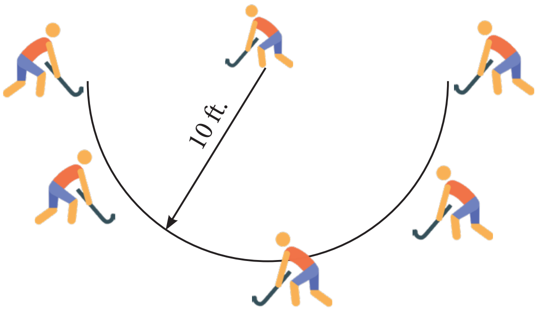
Activity 2

Receiving

Four students stand in a semicircle shape facing the fifth student who stands in between a 4 metre marked line.

- A passes the ball to B and B returns it to A.
- The same continues with C, D and E.
- B, C, D and E take the position of A in turns. The practice continues.

Lead-up Activity



Passing & Receiving

Organise into teams of 6 students each. Make five students stand in a semicircle at specified intervals and the sixth student stand 10 metres in front of them as shown in the picture. On the teacher's command, the student who stands in the middle passes the ball

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to the students in front of him and receives it back. Thus, each student has to pass the ball and get it back. The student in the middle has to switch places after passing the ball to all the students. The team wherein the sixth player returns to the starting position is declared the winner.

Objectives

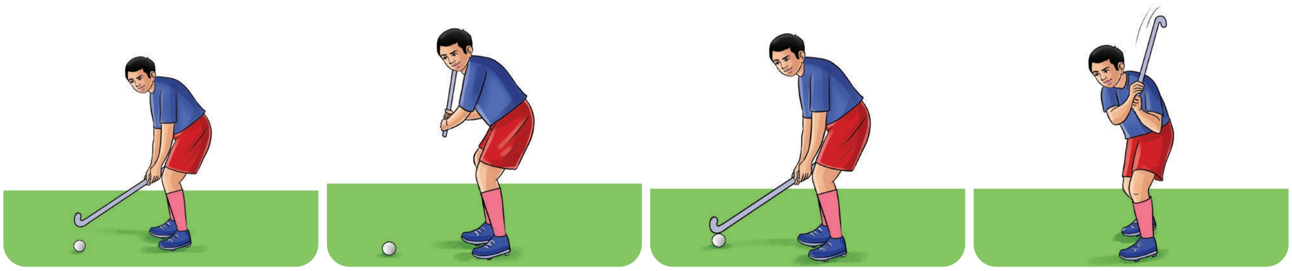
- To develop the fundamental skills required for effective hitting in hockey.

Teaching the Skill

Hitting the ball with speed and accuracy is a vital skill in hockey. A hit is used to pass the ball to a long distance as quickly as possible. The main goal of hitting is to make the ball reach its target. The speed at which the ball travels is an important factor in hockey.

Hitting

Grip: Hands together on top edge of handle with "V" grip.



Stance

- The ball is placed to right at stick length from body.
- The left foot is placed in line with the ball while swinging the stick back.
- Hit at the bottom of the ball.

Follow through

- After hitting the ball, swing the stick across the body.

Teaching tips

- Hold the stick with both hands.
- The swing should be in a smooth and controlled way.
- Hit from the "bottom half" of the ball. When hitting a moving ball, ensure the final touch is in the direction that the player wishes to hit the ball.

Practising the Skill

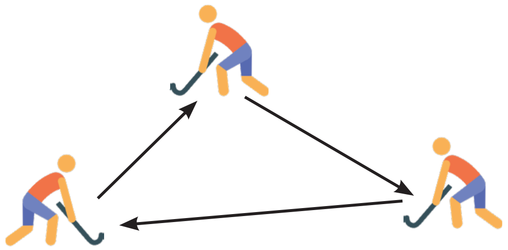
Activity 1

One against One : Two students stand facing each other at a distance of 15 to 20 metres. They practise returning the ball.

Activity 2

Three Students Assemble in a triangular position at a distance of 20 metres and practise hitting in a clockwise and anticlockwise direction.

Variation: Number of balls or distance could be increased.



Lead-up Activity

Wooden sitting benches are placed as backboard and sideboards behind the goal line as shown in the figure as target. Students are grouped into two teams. Each team member will be given 3 chances

to hit from a distance of 14.63 metres (shooting circle). The scoring for hits is as follows. If the ball enters the target at or below the backboard and side board height, five points are given. If the ball enters the target above the side board, backboard height, three points are given. If the ball goes off the target, zero point is given. Each team's score will be calculated based on the team members hit. The team that scores the maximum points will be the winner.

(**Note:** Wooden sitting benches can be used as a target where there is no hockey field).

Ball Badminton

Objectives

- To develop basic ball badminton skills, including holding the racquet, servicing and smashing techniques.

Teaching the Skill

Mastering the skills of holding the ball badminton racquet, servicing and smashing are very important to improve the basic skills of ball badminton. Correct grip of the ball badminton racquet, accurate hitting of the badminton ball and the ability to hit the ball with precision are very important for success in the game of ball badminton. Along with this, the footwork of the player and the angle of the badminton racquet while smashing from a standing position is the foundation for playing ball badminton.

Holding the racquet

The racquet should be held on the grip part where tape is wound. The thumb should be placed on top and the other four fingers should grasp around the grip tightly.

Service

Stand with the left foot in front and the right foot behind. The body weight should be balanced on the rear foot. Hold the racquet by bending the right elbow so that its head is below the waist level and hold the ball in the left hand.

Drop the ball from the left hand. Swing the racquet upward and hit the ball with the forward motion of the right hand. The body weight is transferred to the leg kept in the front and apply the required acceleration to the right hand.

Smash

Stance: Stand with the left leg forward and the body is slightly bent backward. Keep the body weight on the rear leg. Turn the right shoulder a little to the right side and hold the racquet over the head.

Hitting the ball

When the ball comes above the head, the front-line players should hit the ball with a less swinging motion of the racquet. The back players should swing the bat across by giving a spin to the ball. While hitting the ball, give force to the hand by twisting to the left and the body weight should be transferred to the left leg. After the smash, the racquet comes downward and the player gets ready to play the next ball.

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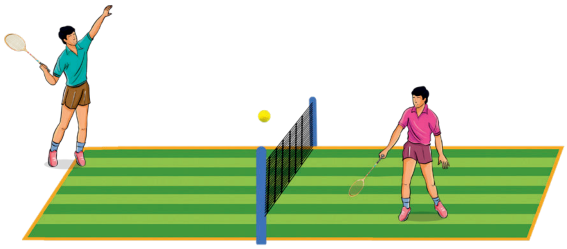
Practising the Skill

1. Clear Drill :



Stand at the back of the court and hit high shots to the back of the opposite court, aiming to make the ball land near the baseline.

2. Drop and Lift Drill:

A student performs drop shots from the front court, while the other student lifts the ball from the back court.

3. Shadow Badminton Drill:

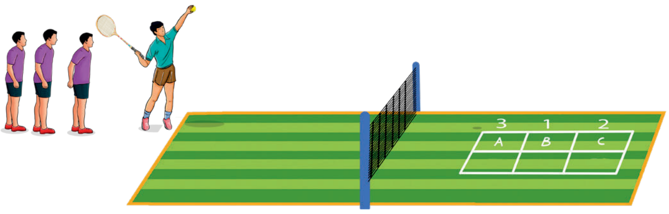
Practising the movements of playing shots around the court forehand, backhand and smashing without the ball. Focus on footwork and quick stride technique.

4. Wall Rally Drill:

Hit the ball against a wall and try to maintain a rally as long as possible.

Lead-up Activity

Target Shot



Organise students into two teams and line them up to stand in the service line of the Ball Badminton court. Mark the court as shown in the figure, with three target areas (A, B and C) on one side. Points are awarded as follows.

3 points if the ball lands in area A
2 points if the ball lands in area B
1 point if the ball lands in area C

Each student will have three opportunities to hit the ball from the service area. When the teacher's whistles, the first student from the first team steps up to the service area and hits the ball towards the target areas on the opposite side. Encourage the students to aim at the highest-scoring area (A). After each shot, the teacher records the score of the student. The student then moves to the back of their team's line and the next student steps up to take the turn. Repeat the process until all the students from both teams have had their three opportunities. Add up the total points for each team. The team with the highest total score will be declared the winner.

Handball

Objective

- To develop dribbling skill and accuracy of overarm throw in the game of handball.

Teaching the Skill

Handball is an international game. It is a game played in a small area and with less equipment. The students develop their physical ability by playing this game.

In handball, players need to work on dribbling skills for ball control and accuracy to score points. Moving the ball using fingertips is called dribbling, overarm throws require power.

Dribbling

Use open palm on top of the ball and flex the elbow at approximately 90°. Extend the elbow, use the fingertips to direct the ball to the floor and keep the head up. Flex the elbows and as the ball rises, use fingertips on top of the ball to dribble.

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Over Arm Throw

Hold the Ball: The ball should be held by the strong hand. All the five fingers should be spread over the ball to catch it.

Stance: Stand by keeping the left leg forward and the right leg behind. Body weight is on the right leg. Twist the body to the right and swing the throwing arm behind.

Execution: Twist the body forward and bring the right arm with the ball forward and the body weight is transferred to the left leg. Then throw the ball with a quick wrist action. After the throw, continue the follow-through actions.

Practising the Skill

Dribble and Dodge

Equipments: Handballs, Cones.

Create a zigzag path using cones, with enough space for players to dribble between them. Place a goal or target area at the end of the path. The student starts at one end of the zigzag path with a handball. They must dribble the ball, bouncing it on the ground. Encourage the student to change direction quickly to simulate dodging the opponents. Once they reach the end of the path, students take a shot at the goal or target area.

Instruction

Students must keep the ball under control and within bounds. If the ball goes out of the zigzag path, they must return to the start and begin again.

Variations:

Timed Challenge: Have students complete the drill against the clock to add pressure.

A specific timer is kept for the students to complete the task. Time taken is noted to increase the speed.

Lead-up Activity

Target throw

Organise the students into two groups A and B. Arrange the students one behind the other on the starting line as shown in the picture. Draw a throw line 10m from the starting line and goal post with cones 6 m away from the throwing line. Each team should choose a goalkeeper and place them behind the goal post. As soon as the teacher whistles, the student has to dribble the ball and once he reaches the throwing line he should throw an over hand pass on the target. One point is awarded for a correct throw into the goal post. No points are awarded if the ball goes out of the post. The goalkeeper must catch the ball of his team and pass it to his teammate. If the goalkeeper fails to catch the thrown ball, the goalkeeper must run and pass the ball to his teammates. The team with the maximum number of points in five minutes will be declared the winner.

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Chess

Objectives

- To develop the techniques for checkmate with two Rooks, checkmate with one Rook and checkmate with the King and Queen in chess.

Teaching the Skill

The endgame is very important in chess. The students should learn the strategies of the endgame to finish successfully. Endgame refers to the stage of the game where a few pieces remain on the board.

Checkmate:

When the King is under attack it is known as "Check" and at the same time there is no way for the player to defend the threat to the King is known as "Checkmate". The player who places the checkmate wins the game. To outperson the endgame we have to learn different techniques.

Here are a few techniques for the endgame with King, Queen and Rook.

1. Checkmate with two Rooks (Fig-1)
2. Checkmate with the King and one Rook (Self mate - Fig-2)
3. Checkmate with the King and the Queen (Help mate - Fig-3)

1. Checkmate with two Rooks: Checkmate with two Rooks is one of the most straightforward basic mating patterns one should know how to perform. To execute that, use both Rooks to cut down the King and push the opponent to the edge of the board as shown in the picture, where the opponent has no way to escape. So, the player wins (Fig.1).

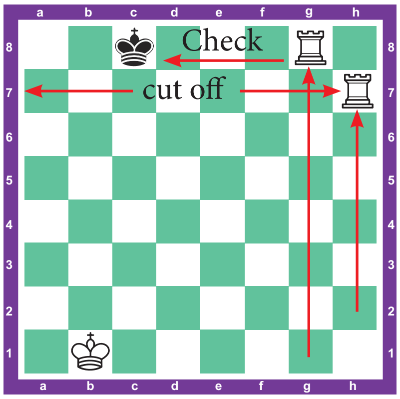


Figure-1

2. Checkmate with King and one Rook: Another basic checkmate pattern, the idea behind this mate is to push the opponent's King to the edge of the board, using the King to protect the escape squares of the opponent's King and then use the Rook to deliver the final blow (Fig.2).

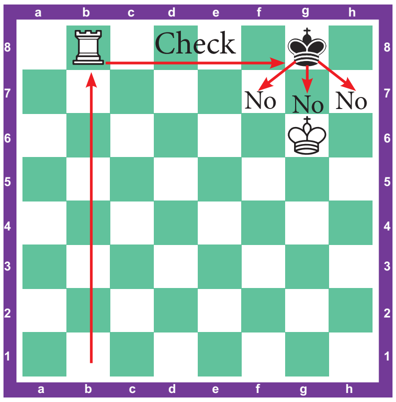


Figure-2

3. Checkmate with King and Queen: Frequently, Pawn is promoted to Queen during endgames. For this reason, one should know how to perform this mate. With the help of the King, one can checkmate the opponent's King once it is forced to move towards the edge of the board. It is known as the "**boxing method"**. The "boxing method" with a King and a Queen is shown in the picture (Fig.3).

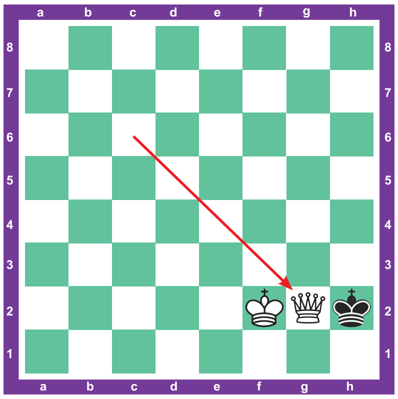
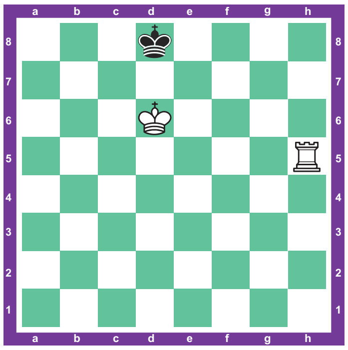


Figure-3

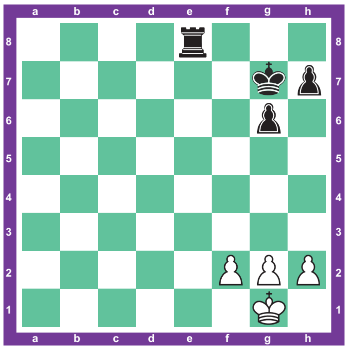
Practising the Skill

In chess, mastering the strategies for checkmate with two Rooks, with King and one Rook, with a King and a Queen, is essential for endgame success. Practise the above strategies.

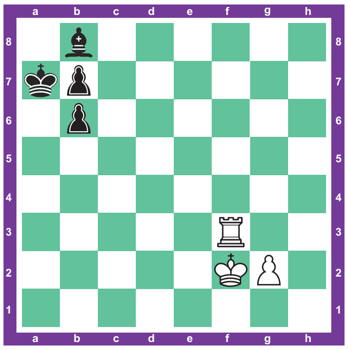
Activity 1: Checkmate with a single Rook.



White to move and mate in one

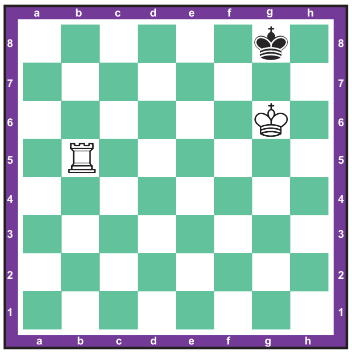


Black to move and mate in one

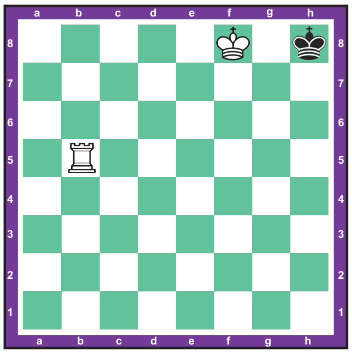


White to move and mate in one

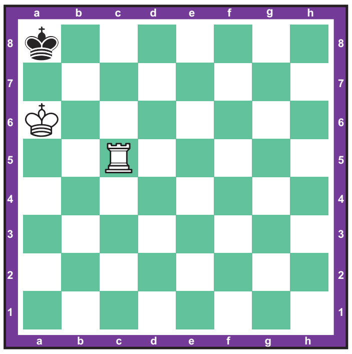
Activity 2: Checkmate with King and one Rook.



White to move

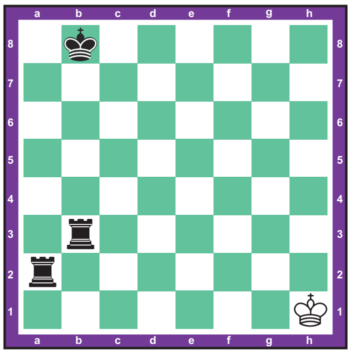


White to move

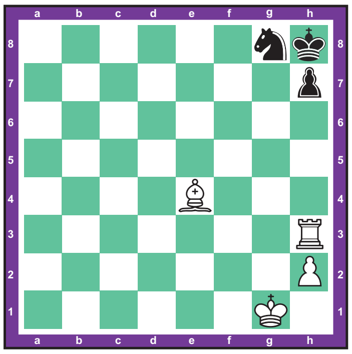


White to move

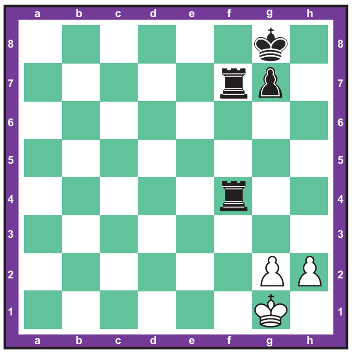
Activity 3: Checkmate with Rook(s)/Rook and Bishop.



Black to move

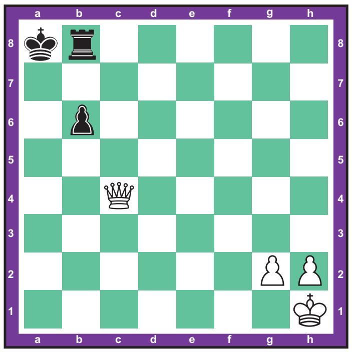


White to move

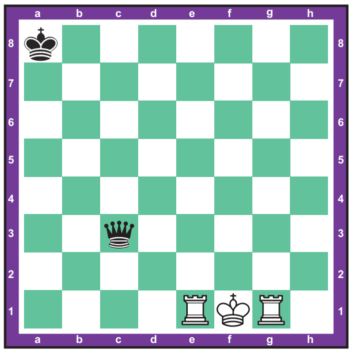


Black to move

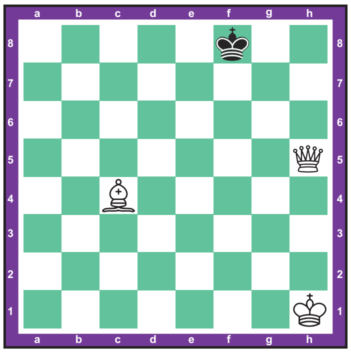
Activity 4: Mate with Queen, mate with Bishop and Queen.



White to move



Black to move



White to move

Crouch Start or Bullet Start

Objective

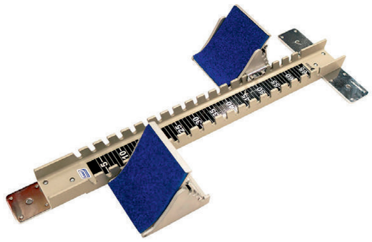
- To enable the students to understand and execute the crouch start technique proficiently for sprinting events.

Teaching the Skill

Crouch Start: The crouch start is divided into four phases. They are on your marks, set, drive and acceleration.

- In the “on your marks” phase, the sprinter takes the initial position on the starting block.
- In the “set” phase, the sprinter moves to an optimal starting position.
- In the “drive” phase, the sprinter leaves the block and takes the first stride.
- In the “acceleration” phase, the sprinter increases the speed and makes the transition to running.

Block placement and Adjustment

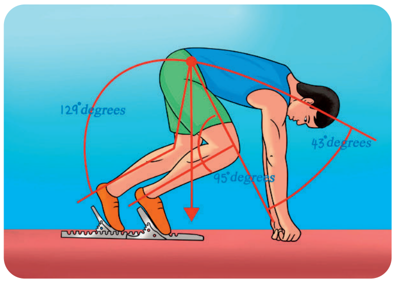


- Front block is placed 1½ foot lengths behind the starting line. Rear block is placed 1½ foot lengths behind the front block.
- Front block is usually set flatter.
- Rear block is usually set steeper.

“On Your Marks” Position

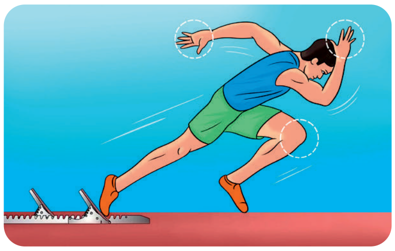
- Both feet should be in contact with the ground.
- The knee of the rear leg rests on the ground.
- Hands, slightly wider than shoulder-width apart and the fingers arched are placed on the ground.
- Head is aligned with the back, eyes look down at the ground.

“Set” Position



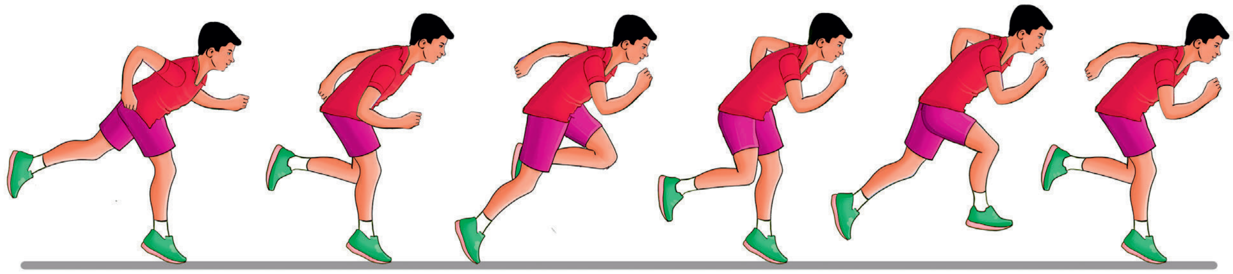
- Heels press backwards.
- The knee of the front leg is at 90° angle.
- The knee of the rear leg is at 120° to 140° angle.
- Hips are slightly higher than the shoulders, the trunk is inclined forward.
- The shoulders are slightly in front of the hands.

Drive Phase



- Trunk straightens and lifts as both feet press hard against the blocks.
- Hands are raised from the ground together, then, swing alternatively.
- The push of the rear leg is hard, the step is short, the front leg’s push is a little softer but longer.
- The rear leg moves forward rapidly while the body leans forward.
- The knee and hip are extended during the drive.

Acceleration Phase



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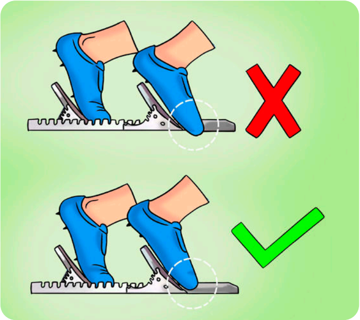
- The front foot is placed quickly onto the ball of the foot for the first stride.
- The forward lean is maintained.
- The lower legs are kept parallel to the ground during recovery.
- Stride length and stride frequency should increase with each stride.
- The trunk straightens gradually after 20 to 30 metre.

Practising the Skill

On your marks:



- Keep the strong foot on the front plate of the starting block and place the well-coordinated leg on the second plate of the starting block.
- The knee of the rear foot should be placed at the ball of the front foot.
- Five parts (two hands, two toes and rear foot knee) should touch the ground and the body weight should be evenly distributed.
- Breathe gently. Face and neck muscles are relaxed.

Set:

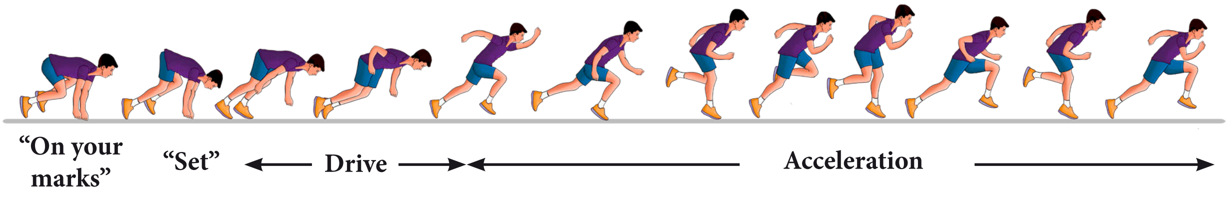
- Hips raise slowly to a position above the shoulders, the angle of the front leg is about 90 degrees and the angle of the rear leg is about 120°. Hold the breath.

Go:

- The athlete\possible upto 20 metre. Practise again and again.

Lead-up Activity

Organise the students into groups of 6 or 8 and form lines at the starting line. All the students are expected to take part in the 30-metre race. Give the command "On Your Marks, Set, Go" clearly and confidently to start the race. Encourage the students to exert their best effort and complete the race. Acknowledge and appreciate the student who completes the finishing line first.



Hurdle Clearance

Objective

- To improve the efficiency and speed of hurdle clearance by enhancing the coordination and biomechanics of athletes in navigating hurdles.

Teaching the Skill

Phase Description

Sprint hurdling comprises two elements:

- Sprinting between the hurdles
- Hurdle clearance (which can be broken down into take off, clearance and landing phases)
- In the sprinting element, the hurdler focuses on repeated three stride accelerations.
- In the hurdle clearance element, the hurdler minimises the time in the air and prepares for the next running stride.

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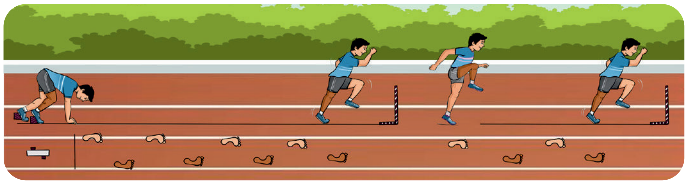
Approach 3- stride Rhythm

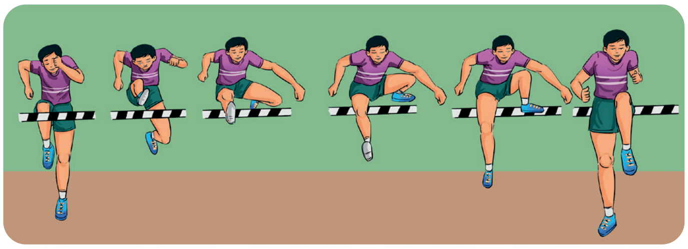
- Usually, eight strides to the first hurdle (take off leg is in the front position in the starting blocks).
- Upright body position is achieved earlier than in a sprint start.
- Three strides between the hurdles (short-long-short).
- High body position between the hurdles.

Take off Phase



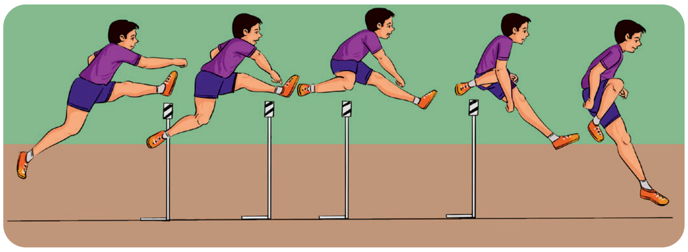
- The high body position for the attack.
- Drive is more forward than upward. (Run 'into' the hurdle, do not jump)
- Hip, knee and ankle joints of the support leg are fully extended.
- The thigh of the leading leg swings rapidly to the horizontal position.

Clearance Phase



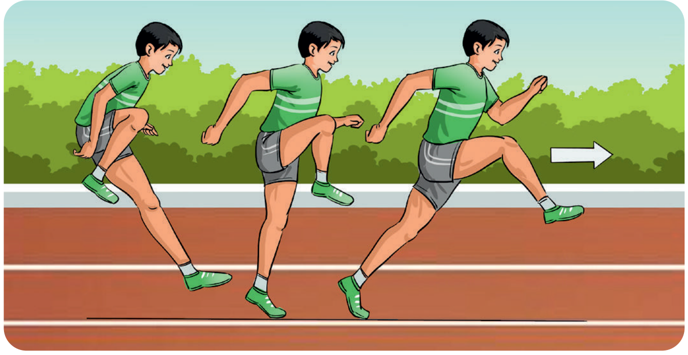
- Take off is well in front of the hurdle from the ball of the foot (two thirds of the overall hurdle stride).
- The lead leg is actively lowered as quickly as possible after the hurdle.
- Landing is active and on the ball of the foot (no heel contact at touchdown).

Clearance Lead Leg



- Lower part of the leading leg is actively extended forward and then downward in the direction of running.
- The foot of the leading leg is flexed.
- The forward lean of the trunk is more pronounced for 'higher' (relative to athlete's height) hurdles and only what is essential for 'lower' hurdles.
- Shoulders remain parallel to the hurdle and facing forwards.

Clearance Trail Leg



- Trail leg is drawn along the body.
- Thigh of the trail leg is roughly parallel to the ground at clearance. Angle between the thigh and lower leg is about 90° or less.
- Ankle of the trail leg is dorsiflexed markedly. Toe is tilted upward.
- The knee of the trail leg is kept high as it pulls through.

Landing Phase

- Landing leg is 'stiff'. Landing is on the ball of the foot.
- The body should not lean backwards on landing.

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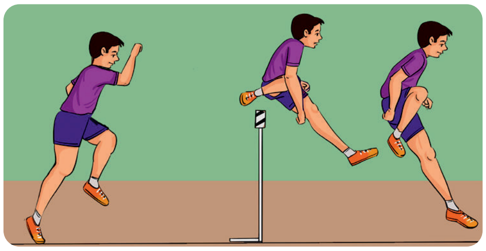
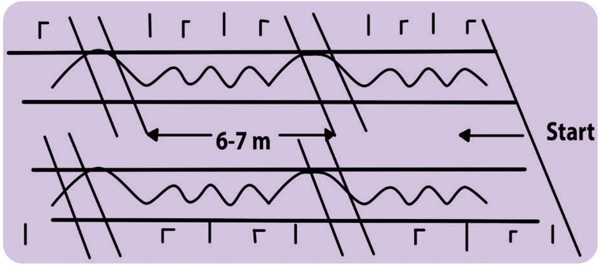
- The trail leg stays tucked until touchdown, then it pulls quickly and actively forward.
- Contact with the ground is brief, the first stride is aggressive.



Practising the Skill

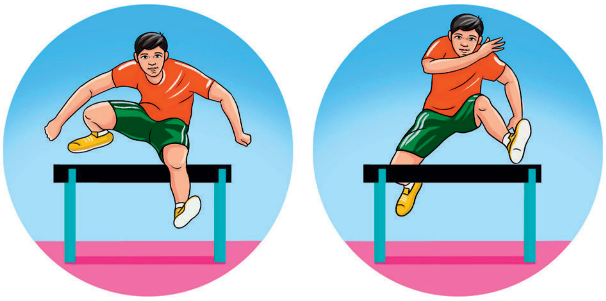
Rhythmic Run

- Use sticks to mark 0.5-1m spaces 6-7 m apart.
- Use a short approach with either leg to take off.
- Run over the sticks with 3 strides in between.
- Do not jump.



Run alongside the Hurdle

- Use hurdles of moderate height 7–8 m apart.
- Run alongside hurdles in a 3-stride rhythm.
- Clear the hurdle with either a lead or trail leg.



Lead-up Activity

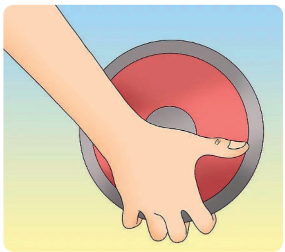
Organise the students into two equal groups, A group and B group. The distance between the starting line to the finishing line is 40 m. Place 3 hurdles with a distance of 10m each. On command, the first student from each group runs and clears all the hurdles. When the last hurdle is completed, returns and taps the next student and continues the game until the last student completes. The group that completes first is declared the winner.

Discus Throw

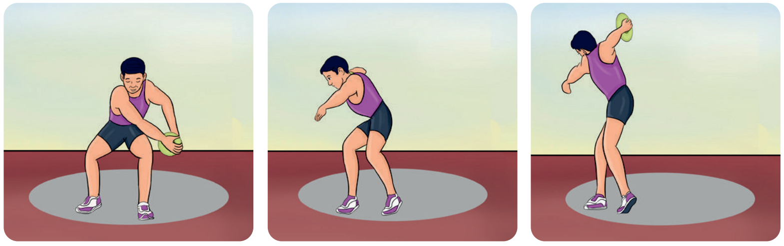
Objective

- To develop students' proficiency in the discus throw technique through comprehensive teaching and training methods.

Teaching the Skill

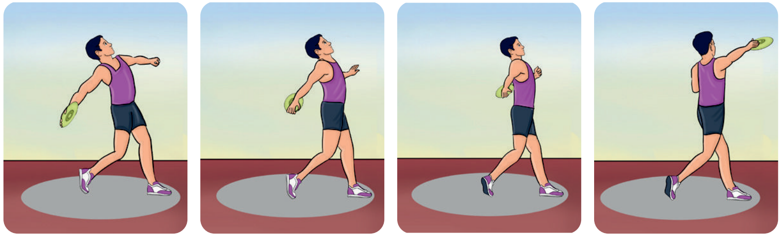


Holding the discus: As the teacher, instruct the students: When holding the discus, position the throwing hand on top of the discus with the fingers evenly spread. The top knuckle of four fingers should touch the rim and fingertips should be over the sides. Alternatively, you can place your index and middle fingers together while evenly spacing the remaining fingers.



Preliminary Swing: Stand at the back of the throwing circle (ring) facing against the throwing direction. Stand at the back of the ring with feet wide apart, knees and waist slightly bent. Rotate torso clockwise, holding the discus in the throwing hand. Keep the non-throwing arm pointed in the opposite direction. Maintain the distance between the throwing hand and body. Weight is on the right foot, while the left heel off the ground.

Turn to the Centre of the Circle:



Begin by pivoting on the ball of the left foot as it spins towards the centre of the ring. Just before the right foot lands in the centre of the ring, push off the left foot and continue pivoting towards the front of the ring.

The left shoulder, the left knee and the pivoting edge of the left foot should be aligned vertically in a straight line.

Release and Follow Through:

Shift weight forward to pivot hips. Bring the arm up at a 35° angle to release the discus, with hand at shoulder height. Release the discus smoothly.

While rotating the body towards the throwing direction, bring the hand with the disc well towards the throwing direction, bend the wrist slightly and rotate the disc through the index finger to release it.

All of these movements must be in rapid succession.

Practising the Skill

1. Swing and Rhythm:

- Hold the discus high above the left shoulder.
- Swing the discus back towards the right shoulder.
- Repeat this action once or twice to establish a rhythm.

2. On the spot throw:

- On the spot throwing for beginners.
- Teach them to initiate the throw, then bend the body in torso position to hurl the discus.

3. Proper Posture and Initiation:

- Focus on maximising radius and maintaining proper posture.
- Align the hips over the feet, set the release angle with body position and right knee bend.
- Ensure a heel-to-toe movement, with the chin moving in sync with the chest.
- Initiate the movement with the right foot and left arm, avoiding any reverse motion.

4. Weight Shift and Leg Coordination:

- Shift the weight over the left foot by bending the left knee.
- Coordinate the movement of the left arm and left leg to create tension in a triangle shape.
- The right leg should move outward with a big sweep, maintaining a long and slow motion with the knee and toe pointing up.

5. Transition and Drive:

- During the transition, rotate the left knee inward and downward, along with the body turn the left leg completely backward and set the correct angle for the throw. The right leg shortens and drives toward the middle, ensuring the right foot is dorsiflexed.
- Focus on driving off the left foot with a punch, rather than lunging.

6. Power Position and Extension:

- In the power position, aim to get the left foot down quickly.
- Keep the upper body inactive until the left foot makes contact, extending the working phase. Coordinate the movement of the left arm and right leg.

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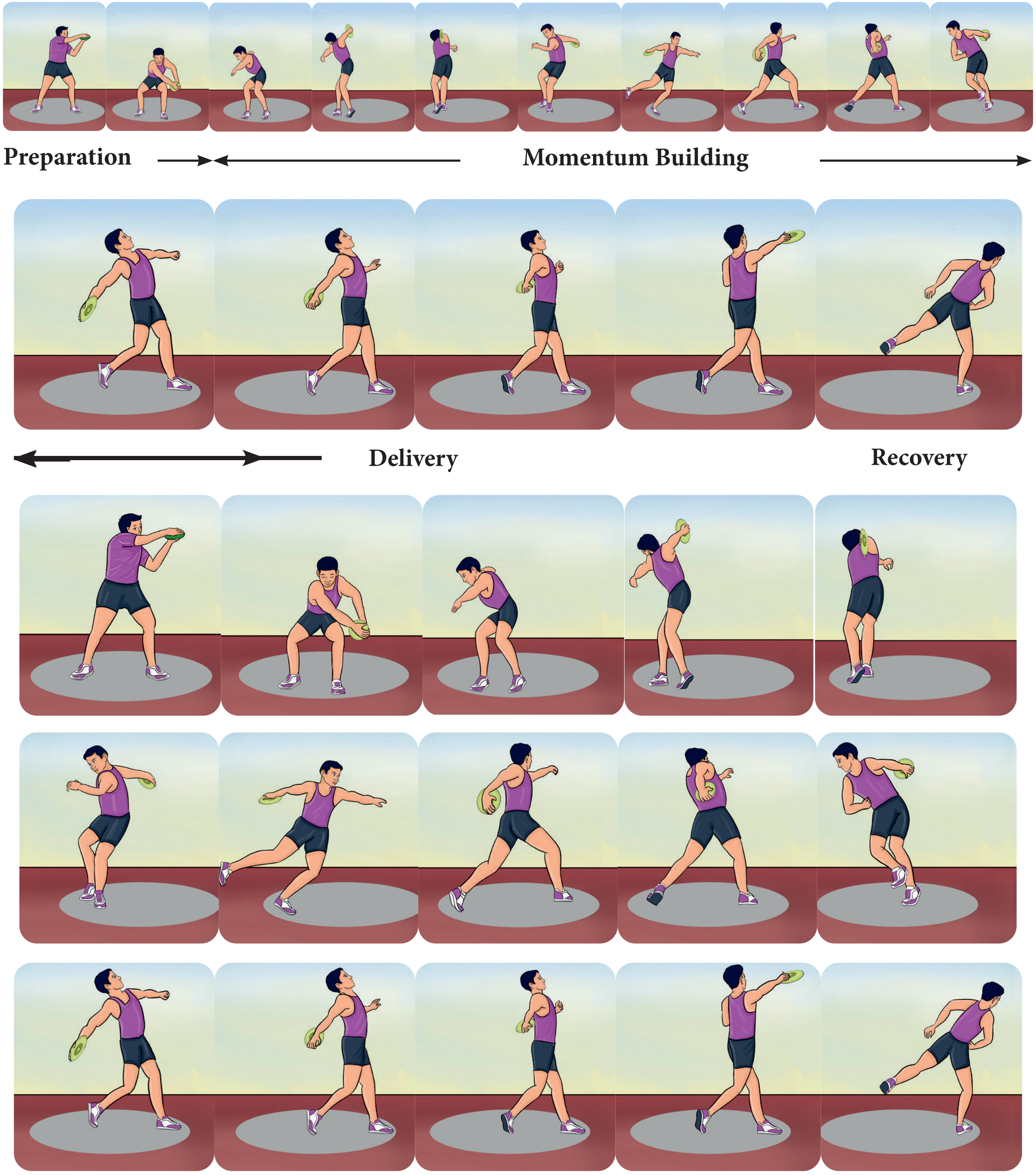
7. Radius Maximisation and Release:

- Extend the radius by hanging the discus out to the right, keeping the right eye on the discus at release.
- Maintain a strong left side block and ensure the right side follows through completely.
- Throw the disc using muscle power. The left foot should leave first, while the right foot stays in contact during the delivery, with the discus's right edge pointing down.



Lead up Activity

Organise students into Team A and Team B. Designate a discus throwing area with marked distance sectors for point allocation. Teams stand facing each other near the throwing area. Students from both teams take turns throwing the discus into the designated sectors. Longer throws earn more points based on marked zones. Keep track of each team's points as students take their turns. The team with the highest total points wins the activity.

Class 8
Unit 4

Tamil Folk Games and Joyful Games

Objective

- To ensure students' happiness through Tamil Folk Games and Joyful Games.

Tamil Folk Games

Ezhu Kal Vilaiyaattu

Draw a square of 20 feet. Then draw a small circle at the centre of the square and pile up seven flat tiles or stones in that circle. A starting line should be drawn at a distance of 10 feet from the centre point of the square. Students should be grouped into two teams of equal numbers, as the throwing team and the defender team. The throwing team must stand behind the starting line. A student from the throwing team should be given a ball in hand. The defender team must stand around the square. On the teacher's command, the student who has the ball in hand has to throw the ball to disperse the stones. If dispersed, the defender team standing around the square have to stack the scattered stones one on top of the other. Then, the throwing team will pick up the ball and attempt to hit the defenders below the knees who are trying to stack the stones. If any player is hit below the knee before the stones are stacked, then the throwing team is awarded a point and the defender is out. The defender team takes the turn. The team that scores the maximum points in the game will be declared the winner.

Kannamoochi

Select a student as "Chattampillai" and ask all the other students to gather in the playground to play the game "Saa...Boo...Three". In this game, students who lose Saa... Boo... Three... is declared out and named as "Pattu".

Chattampillai sings a song and covers Pattu's eyes with his hands, "kannam.....moochi rayre....., kattupuchi...rayre...., kandupudi rayre...", while all the other students run and hide themselves. Chattampillai asks Pattu "Ethanai muttai vachirukka?". In response, Pattu has to say the number of students who participated as eggs. Then, again Chattampillai sings, "**Nalla muttaiya thinnuttu, ketta muttaaiya kondu va...**" and opens pattu's closed eyes. Pattu has to catch all the students, if one student touches Pattu before Pattu finds them, then Pattu continues as a catcher. If Pattu finds all the students (eggs), the first student who gets caught must continue the game as Pattu.

Uripanai

Two poles should be fixed in a straight line at a distance of 2 m apart. A connecting wire or rope is tied at the top of the poles in the required height. A ball is tied and hanged tightly in the middle of the rope.

A starting line is drawn 10 m away from the post. Students should be made to sit behind the starting line. After the teacher commands, the first student on the line will stand. Each student is given a turn in order. A five feet stick is given to the first student and the eyes are tied with a handkerchief. The student is rotated twice to the left and right to confuse the student of the correct direction. The target of the student is to hit the ball, which is hung with the stick. Each student is given two chances. If the student hits the ball in the first attempt, 2 points will be awarded. A second chance should be given if the first method fails and a point is

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awarded if it is hit correctly. Failing both times will result in no points being awarded. Thus, the game continues. At the end, the student who scores the highest points should be cheered. Student should follow safety rules while playing.

Sadugudu

Students are divided into two equal groups. Two lines should be drawn on the field, as boundary line and the centre line. The first player of a team is the Raider who enters the playing area of the opponent team. The Raider has to go for a raid by singing the following song

"Sadukudu malayilae rendanai
Thavari vizhundhathu kilattanai
Thookki vittadhu ilavattam
Ilavattam Ilavattam"

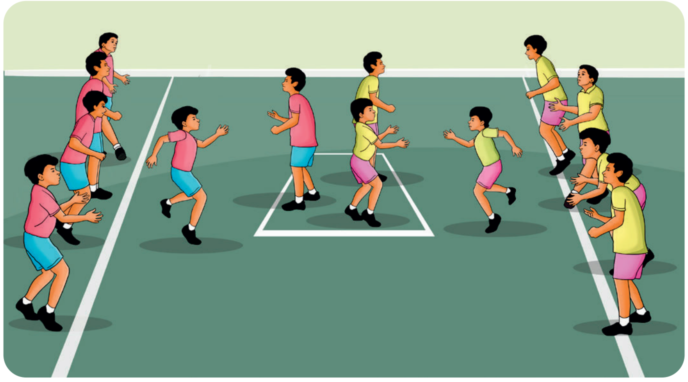
If the raider touches any player in the opponent team and reaches the middle line again, then the player who is touched by the raider is out. Otherwise, if the opposing team stops the raider from touching the middle line, then the raider will be out and points will be awarded to the winning team. Next, a player from the opposing team will act as a Raider. This procedure will be continued for a specific period of time. The team with more points is the winner. In villages, it is played on the bank of the rivers and in towns it is played in public places. During the game, the term sadugu or kabaddi kabaddi are sung and played.

Joyful Games

Guarding the Treasure

Draw a circle of 10 metre radius. A small circle of 1 metre radius should be drawn in its centre and three cones should be placed inside that circle. A blocker should stand outside the small circle. The other shooters stand around outside the big circle and roll the ball and knock down the cones in the smaller circle. The blocker then tries to block the ball with his feet and hands from outside the small circle and prevents the cones from falling. The students who stand outside must keep rolling the ball. If the blocker prevents the cone from dropping for a minute, the blocker is declared the winner. When the teacher blows the whistle, the student who held the ball or rolled the ball at the end of one minute is the next blocker and the game continues.

Conquer the fort



Draw two parallel lines 30 feet apart and a square is drawn 6 feet apart at the centre of the parallel lines. Inform the students that the square is the fort. Organise the students into two equal teams. Make them stand on parallel lines facing each other.

Playing Mode: When the whistle is blown, all the students of both teams rush towards the fort. They can conquer the fort only if all their crew are inside the fort. The team members push out the opponents from the fort and pull in their team members. At the end of 2 minutes, when the teacher blows the whistle, the team members who are maximum in number will be declared as the 'Conqueror' of the fort.

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Human Wheelbarrow Relay

Group the students into two teams. Those teams should line up behind the starting line one after the other. On the teacher's command, the first student in each team should place their hands on the floor while the second student lifts and holds the first student's ankles. The first student walks with his hands and the second student with his feet to reach the boundary line and returns. Likewise, the next two students should go to and return from the boundary line. The team that finishes first is declared the winner.

Back-to-back relay

According to the number of students, students are organised into two groups. Each group of students should be paired. Each pair stands back to back holding their elbows together facing the goal positioned in front of the starting line. Place a cone at 20-metre intervals. At the teacher's command, the first pair, in the group have to carry one student on their back and run to the boundary line. On the return trip, the one who was carried to the boundary line now takes the position of carrying the other student. After returning, they touch the next pair in line and stand at the end of the team. The next pair then repeats the same. The team which completes first will be declared the winner.

Jump over the stick relay

Organise the students into two groups. Draw an endline at a distance of 10 mts. Groups are arranged in files behind the starting line, give the first player of each team a stick. At a signal, the first player runs with the stick to the end line, returns, gives one end of the stick to the second player who holds on to the other end. They both bend down holding the stick between them about 20 cm. from the floor and run until the end of the line of players. Each player jumps over the stick as it reaches him. When the stick has reached the end, the first player remains there. The second player runs with the stick to the end line, returns, gives one end of the stick to the third player and repeats the same. This continues until all have run. The team that finishes first wins.

Change the Indian Club

Directly opposite to each team at the boundary line, draw two circles of the floor, one meter in diameter and place three clubs in one circle. At the teacher's signal the first student of each team runs to the club, picks them up using one hand and set them up in the other circle. He then returns and touches the second student who runs to the clubs and places them back in the original circle. The third student sets them in the other circle again and so on. If a club falls down before a runner reaches the starting line, he must return and set it up again. The team finishing first wins.

Chair Sedan Relay

Organise students into two groups of equal numbers. They should stand behind the starting line in pairs. Each group will have a lightweight student to sit on the chair as a "Chair Sitter".

The first pair should carry their chair sitter in their respective arms and run towards the boundary line marked 20 feet in front. After reaching the boundary line, the pair who carried the chair sitter must stay on that line.

The chair sitter then runs back to the second pair who stands near the starting line. The second pair has to carry the chair sitter and run towards the boundary line and drop him down and the game continues till the last pair completes its turn. The team which reaches the boundary line first is considered as the winner of the game.

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Class 8
Unit 5

Sports Tournaments and Schemes

Objective

- To identify the sporting talents of school students at grassroots level.

Khelo India: Khelo India, or "Let's Play India," is a national initiative by the Government of India aimed at promoting sports, nurturing talent at the grassroots level and developing athletes. It encompasses annual national sports competitions such as Khelo India Youth Games (KIYG), Khelo India University Games (KIUG) and Khelo India Winter Games (KIWG), where young athletes represent their states and universities to compete for medals.

Talent Hunt and Scholarship for Khelo India Winners: Exceptional young athletes are identified at grassroots levels through talent identificication and they receive an annual scholarship of Rs. 5,00,000 for eight years with the aim to make them as an International athletes. Additionally, medal winners in all Khelo India competitions become eligible for government jobs under revised criteria, fostering development across various sporting disciplines.

National Games: The National Games of India are the country's largest annual multi-sport event, featuring various Olympic disciplines and indigenous sports. Notably, the most recent edition in 2023 was hosted by Goa, with Maharashtra leading the medal tally. The event showcases sports diversity and talent from across the nation.

Asian Games: Held every four years, the Asian Games bring together athletes from across Asia (from 1951) to compete in a wide variety of sports, celebrating diversity and unity. The event includes traditional Olympic sports, Asian-specific sports and indigenous sports from the host region. The most recent Asian Games took place in 2022, with the next edition scheduled for 2026 in Japan.

Olympic Games: The Olympic Games symbolise human athleticism, fellowship and international cooperation, transcending borders and cultures. Originating in Ancient Greece and revived in the modern era (from 1896), the event unites athletes and spectators worldwide. India has been participating in the Olympics since 1900.

Winter Olympic Games: Inaugurated in 1924, the Winter Olympic Games feature sports like figure skating, ice hockey, skiing and snowboarding. The most recent edition was held in Beijing in 2022, with the next set for Milan-Cortina d'Ampezzo, Italy, in 2026.

Paralympic Games: Organised for para athletes, the Paralympic Games showcase international competitions grouped by type of disability. India has won medals in various events.

High-Performance Sports Centers in Tamil Nadu:

1. **High Altitude Training Centre:** Enhances athlete performance through high-altitude training in Udhagamandalam (The Nilgiris), serving as a premier training ground for elite athletes nationwide.
2. **Sailing Academy and Centre of Excellence in Sailing and Rowing:** Capitalises on Tamil Nadu's extensive coastline to develop water sports, particularly sailing and rowing, with strong Olympic prospects.
3. **Centre of Excellence for Canoeing and Kayaking:** Fosters Olympic medal potential in canoeing and kayaking near the Tamil Nadu Physical Education and Sports University campus.

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Special Scholarships:

- **Special Scholarship for Budding Talents:** Inspires schoolchildren with scholarships awarded to talents identified at regional-level competitions.
- **Chief Minister's State Sports Award:** Recognises outstanding sportsmen, coaches and educators with cash prizes and citations.
- **Chief Minister's State Youth Award:** Celebrates young individuals aged 15 to 35 for exceptional societal contributions, honoring them with cash prizes, citations and medals.

Courses offered by National Institute of Sports:

1. M. Sc. Sports Coaching
2. Diploma in Coaching
3. Certificate courses in Sports Coaching
4. Six-week certificate course in various sports and games
5. Regular courses producing well-qualified coaches
6. Post Graduate Diploma in Sports Medicine.

Class 8
Unit 6

Asanas and Breathing Techniques

Objectives

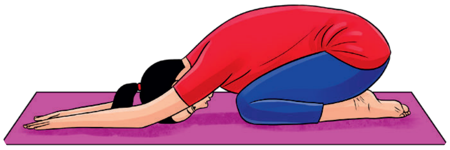
- To enhance physical development, flexibility and mental relaxation through Asanas and Breathing techniques.

Asanas

Shasankhasana

Starting Position: Sit in Vajrasana

- Place the palms on the thigh just above the knees. Keeping the spine and the head aligned erect.
- While inhaling, raise the arms above the head. Palms facing each other, head, trunk and arms are aligned.
- While exhaling, bend the trunk forward. Keep the arms and head aligned with the trunk.
- At the end, the palm and the forehead should rest on the floor in front of the knees.



Vakrasana

Starting Position: Long sitting position.

- Bend the right leg and place the right foot beside the left knee, twist the body to the right (dandasana position). Bring the left arm around the right knee and hold the right big toe or place the palm beside the right foot. Take the left arm back and place the palm on the ground with the back straight.
- Maintain the position for 10-30 seconds with normal breathing.
- Back to the starting position. Repeat the same with the left leg.

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Chakkarasana

1. Body flat on the ground with legs stretched.
2. Inhale, bend both legs and bring them close to the buttocks.
3. Bend both hands and place them on the floor near the ear with the fingers facing the shoulder.
4. Place both palms on the ground and place both feet on the ground and apply pressure to raise the middle part of the body upwards and bend the body like a bow.
5. Now, the body is bent like a wheel or curved like a bow. Maintain it for 30 seconds and bring the body back to the floor.

Ardha Matsyendrasana

Posture : Half Spinal twist
Position : Sitting Position

Procedure:

1. First sit straight and stretch both legs forward.
2. Then fold the left leg under the thigh of the right leg. Then sit with the right leg on the outside of the left leg and the right knee straight up.
3. Hold the foot of the right foot with the left hand and support the right hand on the back. Then gently rotate the upper pelvis to the right. Exhale normally.
4. Sit in the same position for 10 to 30 seconds and then slowly back to the normal position.
5. After resting, change the legs and repeat this exercise.

Advantages

1. Nervousness is cured.
2. Circulation and strengths the digestive system.

Tittibhasana

Posture : Firefly pose, arm-balancing asana
Position : Squatting position

Procedure:

- Begin in a standing position.
- Bend knees and squat down, bringing the palms to the floor in front of the body, shoulder-width apart, keep the fingers spread wide for stability.
- Bring the knees as high up to the triceps, close to the armpits.
- Lean the torso forward slightly, shifting the body weight into the hands. Slowly begin to straighten the arms, lifting the hips and legs off the ground. Keep the hips and legs off the ground. Gaze forward to maintain balance.
- Extend the legs, straight in front of the body, parallel to the ground. Flex the feet and engage the quadriceps to keep the legs active.
- Hold the pose for a few breaths.
- To release, slowly lower the legs back to the ground and return to a squatting position.

Benefits:

- Strengthens arms and shoulders.
- Improves balance.

Breathing Techniques

Mindful Meditation

Mindful meditation with breathing, also known as breath awareness meditation is a practice that involves focusing attention on the sensation of breath as it moves in and out of the body.

1. Close the eyes gently. Focus on the breath.
2. Let go of thoughts about the past or the future and focus on the present.
3. Focus on the breath without trying to change the thought.

Alternate Nostril Breathing

Alternate nostril breathing is also known as NadiShodhana or AnulomVilom.

1. Use right hand to alternate nostrils.
2. Close right nostril with thumb.
3. Inhale deeply through left nostril.
4. Hold breath briefly with both nostrils closed.
5. Exhale slowly through right nostril.
6. Inhale deeply through right nostril.
7. Hold breath with both nostrils closed.
8. Exhale slowly through left nostril.
9. Continue this pattern for 5-10 rounds.
10. After final exhale through the left nostril, release hand and breathe naturally.

Class 8
Unit 7

Sports Injuries, First Aid and Safety Education

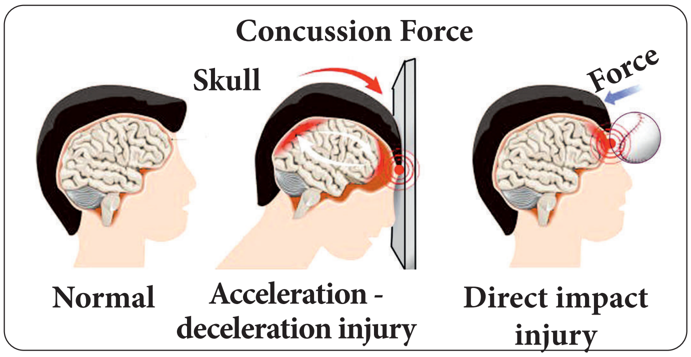
Major Injuries and First Aid

Objective

- To equip students with the ability to recognise and assess the seriousness of minor head injuries, react appropriately to the situation and understand the importance of placing the victim in a lateral position for optimal care and safety.

Head Injuries

Head injuries in sports refer to any form of trauma or damage sustained to the head during athletic activities.



Causes: These injuries can range from mild concussions in various sports, including football, hockey and boxing.

Symptoms: Head injuries in sports can have significant short-term and long-term consequences, includes cognitive impairment, physical disability and death in extreme cases.

Minor Concussions

A minor concussion refers to a mild traumatic brain injury resulting from a blow, a bump or a jolt to the head or body, causing temporary disruption of normal function of the brain.

Symptoms: Minor concussion may include headache, dizziness, confusion, nausea and fatigue, sensitivity to light or noise and difficulty in concentration.

Major loss of consciousness

Major loss of consciousness: Major loss of consciousness refers to a significant and prolonged period of unconsciousness where an individual is completely unaware of their surroundings and unable to respond to stimuli.

Causes: This condition can result from various factors such as trauma and medical conditions.

First aid

Apply ice and gentle compression to the affected area immediately to reduce swelling and pain.

- Keep the victim in a lateral position.
- Monitor their breathing and pulse.
- Seek medical assistance immediately.

Safety Education

Realise the individual capability for safety

- Understanding and practising safety procedures is crucial before, during and after any activity to ensure physical well-being.
- Developing this capability involves gaining knowledge about potential risks and how to mitigate them effectively.
- By prioritising safety, individuals can enjoy activities with peace of mind and minimise the chances of accidents or harm.

Optimum fluid intake for safety

- Optimum fluid intake ensures safety during physical activities by preventing dehydration and maintaining bodily functions.
- During play, stay hydrated and be mindful of limits to avoid exhaustion or heat-related issues. Cool down and replenish the fluids to aid recovery.

Proper recovery and rest for safety

- Proper rest and restoration are crucial for safety in any activity.
- Understanding and following the safety procedures before, during and after play is essential.

Safety procedures to be followed

During Play:

- Stretch muscles before starting.
- Wear appropriate footwear with good traction.
- Avoid deep slippery patches.
- Stay alert and aware of surroundings to avoid hazards like branches.
- Keep movements slow and deliberate to avoid slips.

After Play

- Rinse off mud thoroughly to prevent skin irritation.
- Check for any cuts or abrasions and clean them.
- Dry off completely to prevent chills.
- Hydrate to replenish lost fluids.
- Wash clothes promptly to prevent stains and odours.

During play, to avoid injuries we have to use equipment and play on various surfaces. (Synthetic, Cinder, Astro truf, Wooden)

Annexure

Beach Volleyball

History

Beach volleyball is an outdoor team sport played on a sand court by two teams of two players on each side. Beach volleyball was played for the first time on Waikiki Beach in Hawaii, USA at the Outrigger Canoe Club in 1915. In 1987, Beach volleyball was included into Federation International de Volleyball (FIVB). Beach volleyball was introduced as a demonstration sport in 1992, Barcelona Olympics. Beach Volleyball was officially introduced in 1996, Atlanta Olympics.

Court Dimensions: The playing court is a rectangle measuring 16 x 8 m, surrounded by a free zone, which is a minimum of 3 m wide on all sides. The free playing space shall measure a minimum of 7 m in height from the playing surface.

Playing Surface

The court should be made of levelled sand. The playing field should be as uniform flat areas as possible that do not contain stones and anything else that can injure players. For world competitions such as FIVB, the sand must be at least 40 centimeters deep.

Lines of The Court

All lines are 5-8 cm wide. The lines must be of a colour which contrasts sharply with the colour of the sand. Court lines should be ribbons made of a resistant material and any exposed anchors should be of a soft and flexible material. There is no centreline.

NET

The net is 8.5 m long and 1 m (+/ -3) wide. It is made of 10 cm square mesh.

Horizontal Bands

At its top and bottom there are two 7-10 cm wide horizontal bands, preferably in dark blue or bright colours, sewed along its full length.

Side Bands

Two colour bands, 5-8 cm wide and 1 m long and are tied vertically to the net and placed above each sideline. They are considered part of the net. Advertising is permitted on the sidebands.

Height of the Net

The height of the net will be 2.43 m for men, 2.24 m for women,16 years and under (boys and girls), 2.12 m for 14 years and under (boys and girls), 2.00 m for 12 years and under (boys and girls).

Antennae

An antenna is a flexible rod, 1.8 m long and 10 mm in diameter. It is made of fiberglass or similar material. Two antennae are fixed to the outer edge of each side band. The top 80 cm of each antenna extend above the net and are marked with 10 cm stripes of contrasting colours, preferably red and white.

Posts

The posts supporting the net must be rounded and smooth, with a height of 2.55 m, preferably adjustable. They must be fixed to the ground at an equal distance of 0.7-1 m from each sideline to the (post padding).

Players

A team is composed exclusively of two players and there is no substitutions or replacement of players.

Time-Out

Each team is allowed to a maximum of one time-out per set and duration of time out is 30 seconds.

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Jersey Number

Players' jerseys must be numbered 1 and 2. The number must be of a contrasting colour to the jersey and a minimum of 10 cm height and 1.5 cm wide.

To Win a Set

A set (except the deciding 3rd set) is won by the team that first scores 21 points with a minimum lead of two points. In the case of a 20-20 tie, play is continued until a two-point lead is reached (22-20, 23-21 etc.)

To Win a Match

The match is won by the team that wins two sets. In case of a 1-1 tie, the deciding set (the 3rd) is played to 15 points with a minimum lead of 2 points.

Officials

One first refree, one second refree, one scorer, one assistant scorer and four (two) line judges.

Judo

Judo is a modern form of martial art which needs great balance upon one's body and mind. The word Judo means gentle way. The sport originated in Japan in the 19th century and Jigoro Kano is known as the father of this sport. Earlier, it was confined to only Japan but later due to its popularity it made its place in Olympics in 1964.

Judo – Age Group

The world championship for women and men has no particular maximum age limit. However, no person below 15 years of age is allowed to play in any competition of judo as decided by International Judo Federation (IJF).

For Junior World Championship (under 20), men and women from 15-19 years old are eligible. For Cadets World Championship (under 17), boys and girls of age 15 and 16 years are eligible.

Techniques in Judo

Techniques in Judo are known as Waza. Three different types of Waza are as follows.

- Nage-Waza (Throwing Techniques)
- Katame-Waza (Grappling Techniques)
- Atemi-Waza (Attacking Techniques)

Atemi-Waza is not popular because it is designed to hurt the opponent.

The person who performs this Waza is known as tori and upon whom this Waza is applied is known as uke.

Nage-Waza

In this technique, the tori tries to throw the uke on the ground. This also involves various stages. The act of balance breaking under this Wazas is known as Kuzushi. Similarly, the act of turning in and fitting into the ground is known as Tsukuri. The act of successfully executing and throwing upon the ground is termed as Kake.

Katame-Waza

This process involves the art of holding someone firmly and seizing (him/her). This Waza is further divided into many categories such as

- Osaekomi-Waza (holding technique),
- Shime-Waza (act of choking the uke by the tori)
- Kansetsu-Waza (tori tries to make uke down by manipulating his joint parts).

Judo – Scoring

One full point in judo is otherwise termed as Ippon. The competitor who gets awarded with one full point or Ippon is declared as the winner of the match.

Half point is termed as Waza-ari. When two half points are awarded in a match, then it is equivalent to Ippon and the match comes to an end.

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The smallest score that can be awarded in judo is termed as Yuko.

To score an Ippon, one has to throw other on his back with impetus and control. However, if the throwing is done with lesser force then it results in a Waza-ari. An Ippon or two Waza-ari is sufficient to win the match.

If the contestant gets successful in throwing his counterpart side wise then, he/she will be awarded with a Yuko. This Yuko has no effect until the match ends in tie. In case of draw, Golden score rule issued.

Etiquette in Judo

Before stepping into the Judo mat, the contestant must bow. Before starting and after ending the game the contestant must bow to each other and also to the competition area. If anyone uses bad body gesture or uses foul languages, then he/she will be debarred from the tournament.

Judo – Competition Area

It must be played upon a stage of having a minimum size of 14×14 meters. The rules also say that the stage must be built from tatami. It is a mat that is used for the flooring purpose.

Penalties in Judo

Generally, two types of penalties are there in Judo. One is shido and another is hansoku.

Shido is awarded when a competitor remains in longer period of non-aggression. It is also awarded for minor rule breach. After two warnings, one shido is awarded. The number of shidos decides the winner in case the match ends in tie.

On the other hand, four shidos will make one hansoku. Hansoku is also awarded for major rule violation. There may be a chance that he/she may get disqualified from the tournament.

Leg Sweeping Techniques

Leg sweeping is a process in which a player tries to put his opponent on the ground using his legs. Mastering this technique can be a key factor in winning a match.

Here are some cool techniques that one should learn and try.

Foot Sweep

Step 1: Allow the opponent to step forward.

Step 2: Before he steps back, just catch one of his ankle with the leg.

Step 3: Now swift the ankle through the leg towards the appropriate direction and let it go so that he will fall on his back on the ground.

Nice Leg Sweep

Step 1: Apply the whole weight on the body of the opponent such that he will tilt towards his left.

Step 2: Make sure that he applies all his weight on the left leg, right leg being in air.

Step 3: Sweep the supporting leg with strong force, resulting in an instant fall back of the opponent.

Spin Hit Technique

Step 1: Put the leg sidewise between the two legs of the opponent.

Step 2: Turn back towards the opponent.

Step 3: Move the hip closer towards the opponent to support his entire weight on you.

Step 4: Now put the leg near his leg and tilt him up in the air for a clear and easy sweep.

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Fencing

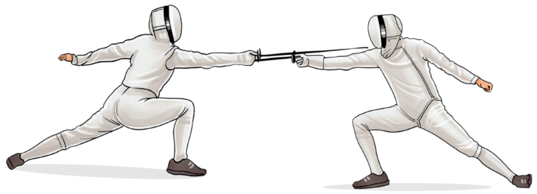
History

Fencing is a combat sports using bladed weapons. The modern fencing entirely differs from classical fencing. Fencing is one of the sport events right from the Modern Olympic (1896). International Fencing Federation (FIE) was founded in 1913.

Fundamental Techniques

Guard Position

The fencer takes up a position by keeping one leg forward with knee flexed and another leg behind bearing the body weight. The sword as well as the hand holding the sword should be fully stretched forward. The body should be crouched to avoid hit by opponent.



Lunge

From the guard position, push off from the rear leg and keep the front leg forward and lunge forward. Stretch the body and hand with sword fully to touch the opponent. The rear leg should be fully stretched.

Attack

While attacking, the fencer should attack above the arm, below the arm, right and left. The leg of the side of sword should be kept forward and the body should be stretched forward to touch the opponent.

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PHYSICAL EDUCATION

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Department of School Education

Untouchability is Inhuman and a Crime

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Physical Development

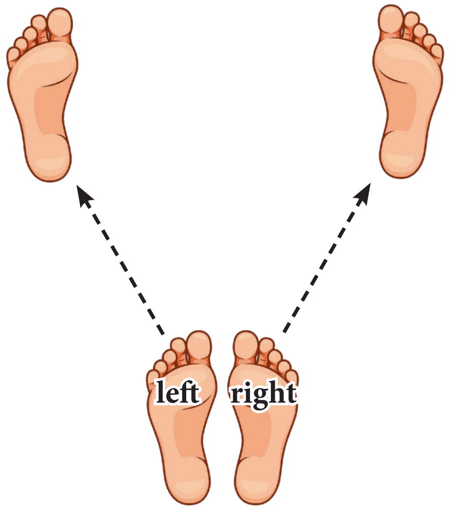
Aerobics

Objective

- To promote physical development through aerobics, pyramid building.

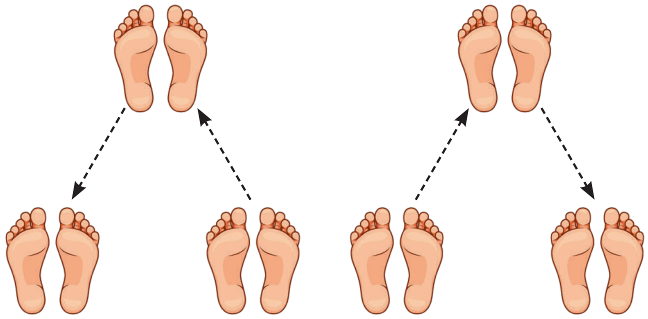
Simple Aerobics

V – Step (out-out-in-in)



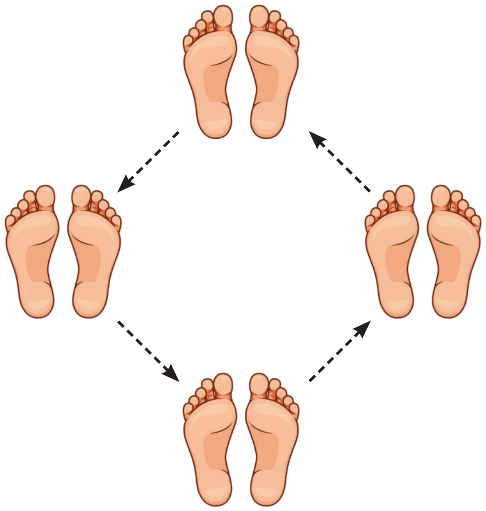
- Stand upright with feet together and swing the flexed arms for the counts.
- Take the right step at 45° outward front.
- Take the left step at 45° outward front parallel to the right leg.
- Bring back the right leg to the position.
- Bring back the left leg to the position. (Continue this practice).

Λ- STEP



- Stand upright with feet together
- Take the right leg outward 45° front.
- Take the left leg close to the right leg.
- Take the left leg backward 45° outward.
- Followed with the right leg close to the left leg.
- Take the right leg front at 45° inward.
- Follow with the left leg close to the right leg.
- Take the right leg at 45° backward.
- Follow with the left leg close to the right leg,

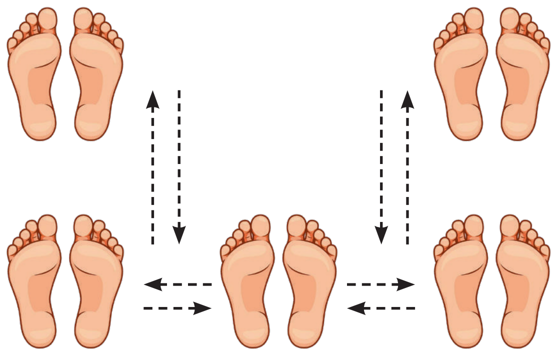
Diamond shape



- Stand upright with feet together.
- Take the right leg 45° outward in front.
- Take the left leg close to the right leg.
- Take the left leg 45° inward in front.
- Take the right leg close to the left leg.
- Take the left leg 45° backward.
- Take the right leg close to the left leg.
- Take the right leg backward to the position.
- Take the left leg close to the right leg.

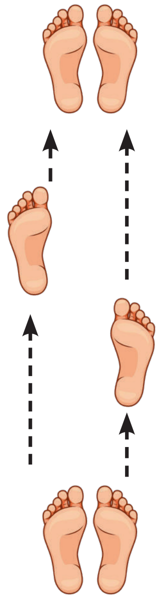
L - SHAPE

Position: Stand upright with feet together, swing the arm for the counts.



1. Take the right leg to the right side.
2. Take the left leg to the right side and stand close.
3. Take the right leg forward (from 2nd position).
4. Take the left leg forward parallel to the right leg.
5. Take the right leg backward to the count-2 position.
6. Take back the left leg backwards to the count 2 position parallel to the right leg.
7. Take the left leg to the count 1 position. Take the right leg to the count 1 position close to the left leg. Return to the starting position.

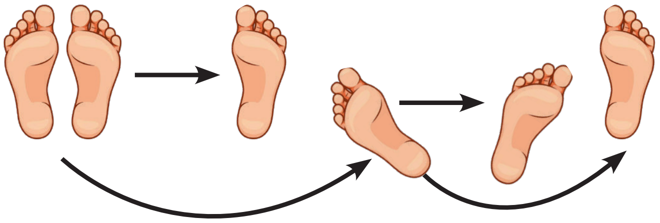
Forward movement with clap



1. Stand upright with feet together.
2. Take the right leg forward 1 foot.
3. Take the left leg forward in front of the right leg 1 foot.
4. Take the right leg forward in front of the left leg 1 foot.
5. Take the left leg, lift it with bent knees, stand on the right leg (Count – 4) with clap.
6. Bring back the lifted left leg backwards 1 foot.
7. Take the right leg backwards to the left leg 1 foot.
8. Take the left leg backwards to the right leg 1 foot.
9. Bring back the right leg close to the left leg and stand upright with clap.

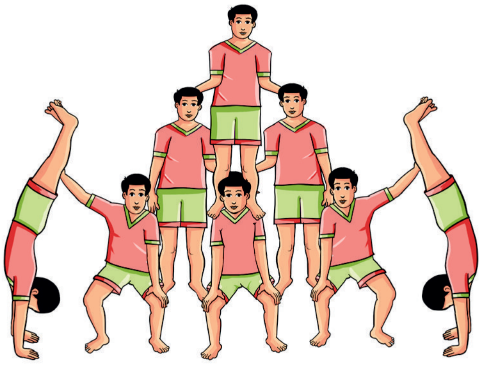
Grapevine

1. Stand upright with feet together.
2. Take the right leg sideward 1 foot apart.
3. Follow the left leg and cross the right leg's back side and stand on the toes with slightly bent knees. (Both knees)



4. Take the right leg sideward 1 foot apart.
5. Follow with the left leg with the toe touch to the right heel (Count 4) with clap.
6. Take the left leg to sideward.
7. Follow with the right leg and cross the left leg and stand on the toes with slightly bent knees. (both knees)
8. Take the left leg sideward to position-1.
9. Follow with the right leg to upright position (Count – 8) with clap.

Pyramid



Multi Men Pyramid 1

- Three students stand side by side with their knees slightly flexed.
- Two students, one between each pair of students, stand on the thigh.

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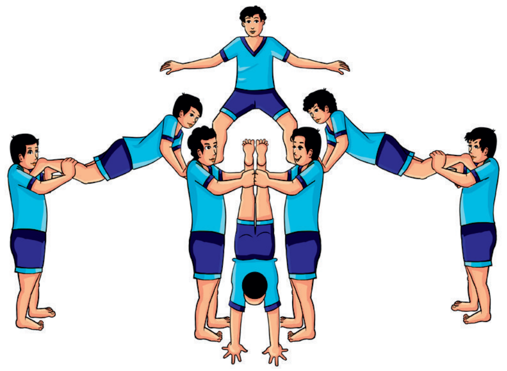
- One student climbs over the student in the middle and holds the students standing on sides.
- Two students, each on either side of the row standing upside down (as shown in the figure) and have their legs held by the students, stand at the ends of the row.

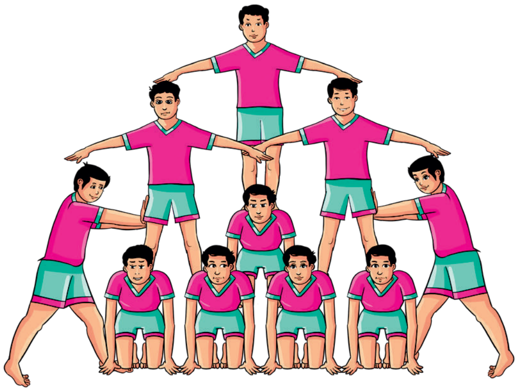
Multi Men Pyramid 2



- A pair of students stands erect, facing each other with one arm distance between them.
- Two additional pairs of students stand behind the first pair, facing the backs of the students in front of them.
- The second student from each pair (standing behind) holds the shoulder of the student who is directly in front of them.
- The last student at each end holds the ankle of the student who is holding the shoulder of the student in front of them. They lift the ankle to shoulder height parallel to the ground.
- In the centre of the formation, another student stands upside down with his hands rested on the floor. The students facing each other in the centre of the formation hold the raised leg of the student standing in the middle for support.
- One student climbs up onto the shoulders of the two students standing face-to-face and stretches his arms sideward to complete the formation.

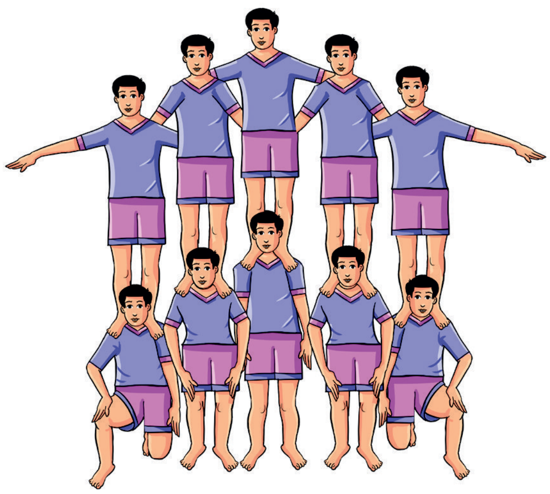
Double decker pyramid 1

- Four students kneel side by side with their hands on the floor.



- One student bends over with their hands on the backs of the two students in the middle.
- One student stands on top of every two kneeling students and extends their arms to the sides.
- A student stands on the shoulders of the bent-over student with the hands raised sidewards.
- Two students stand on the either side of the kneeling students and hold the thigh of the students standing on the kneeling students' backs.

Double-decker pyramid 2



- Five students stand side by side facing forward. The centre student stands straight, while the adjacent students on both sides slightly bend their knees.
- The two students on the extreme ends flex their knees and kneel down, with the leftmost student kneeling on their right knee and the rightmost student kneeling on their left knee.
- Five more students, one on each of the kneeling students, climb up and stand on their shoulders. These students then join their hands.

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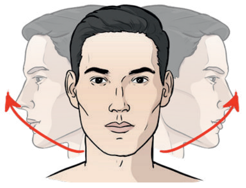
Conditioning Exercises

Objective

- To improve overall fitness, flexibility and well-being through conditioning exercises.

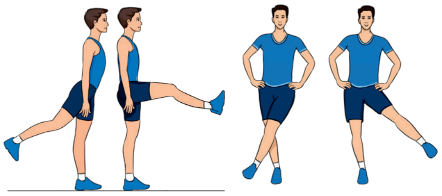


Maintain a comfortable stance with feet apart to ensure balance.

Rotation Exercises

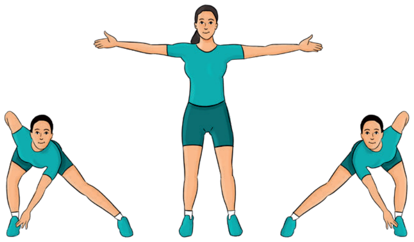
1. Neck Rotation: Rotate the neck clockwise and anticlockwise.
2. Trunk Rotation: Bend and rotate the upper body clockwise and anticlockwise.
3. Hip Rotation: Rotate the hips clockwise and anticlockwise.

Leg Swing Exercises



1. Stand comfortably with feet apart, maintaining balance.
2. Lift the right leg and swing it forward and backward freely six times.
3. Repeat the same with the left leg.
4. Perform sideways swings alternately with each leg.
5. To complete it, perform hopping while swinging the legs.

Alternate Toe Touch Exercises



1. Stand comfortably with feet apart, maintaining balance.
2. Raise both arms sideways.
3. Bend down and touch the right toe with the left hand, keepir
4. Repeat the same with the other leg.
5. Perform this alternately six times.

Jumping Jack Exercises

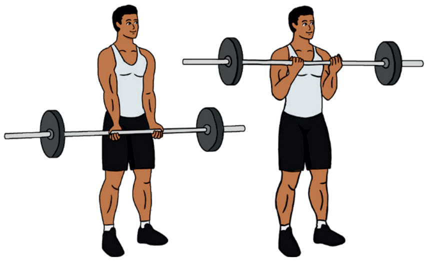
1. Stand comfortably with feet apart, maintaining balance.
2. Jump and clap above the head, then return to the starting position.
3. Repeat this movement continuously six times.

Weight Training Exercises

Objective

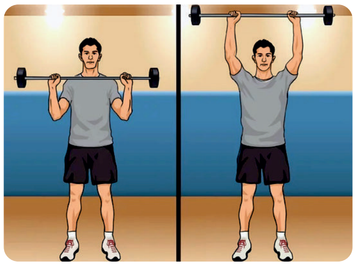
- To develop physical strength through weight training exercises.

Two Arm Curl



- Stand with feet apart.
- Hold the barbell with arms extended downward.
- Slowly flex elbows, bringing the barbell to a bent-arm position in front of the chest.
- Extend the elbows to lower the barbell back to the starting position. Switch between reverse or under grip and regular or upper grip in each set of 10 repetitions.

Military Press



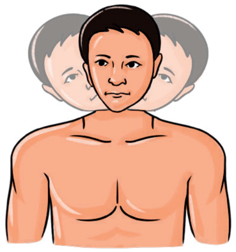
- Stand with feet apart.
- Hold the barbell with arms extended downward.
- Slowly flex elbows, bringing the barbell to a bent-arm position in front of the chest.

- One foot slightly in front of the other. Hold the barbell in front of the chest with arms bent.
- Slowly extend arms overhead until they are fully extended. Hold this position briefly.
- Lower the barbell in front of the chest, bending the arms back to the starting position.

Objective

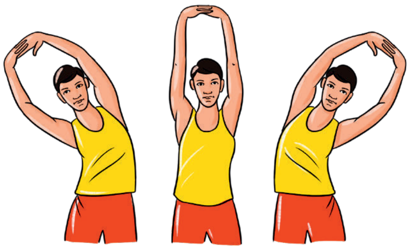
- To improve overall flexibility and balance through stretching exercises.

Stretching Exercises



Lateral head tilt

- Stand erect in a comfortable position.
- Tilt the head towards the right and hold for 30 seconds.
- Gently get back to the initial position.
- Do the same on the opposite side.



Lateral trunk stretch

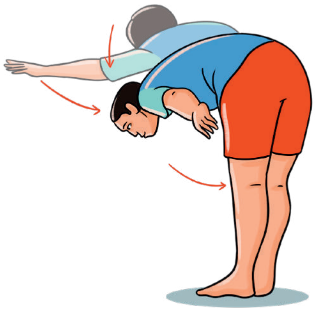
- Stand erect in a comfortable position with feet apart.
- Raise both arms upwards close to the ears and hold them together.
- Slightly bend on to the right side without bending the knee and reach the maximum sidewards and hold for 30 seconds.
- Gently return to the initial position.
- Do the same in the opposite side.

Hamstring muscle stretch

- Stand in a comfortable position in front of a 30 cm. elevated solid object.
- Keep the right leg on the top of the elevated object.
- Without bending the knee, stretch to the right until the pain is felt in the hamstring muscle.
- Hold in the final position for 30 seconds.
- Do the same with the opposite leg.

Shoulder stretch

- Stand comfortably in an erect position.
- Extend both hands behind the back and interlock the fingers.
- Gently take the hands up without bending the elbow.
- Raise until the pain is felt. Remain in the same position for 30 seconds.
- Return to the initial position.



Forward trunk stretch

- Stand erect with feet apart.
- Stretch both hands sidewards.
- Gently bend the trunk forward without bending the knees and elbows.
- Remain in the same position for 30 seconds until the pain is felt.
- Return to the initial position.

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Gymnastics

Objective

- To make the students understand how to do a cartwheel correctly by teaching them the basic hand and foot placement and how to coordinate their arms and legs smoothly, while performing gymnastics.

Teaching the Skill

A cartwheel is a sideways movement of the body. It is done by bringing the hands to the floor one at a time while the body inverts.

The legs travel over the body's trunk while one or both hands are on the floor and then the feet return to the floor one at a time, ending with the athlete standing upright. It is called a cartwheel.

Stage 1

- Take one step forward with the lead leg and raise arms slightly.
- Bend the lead leg at the knee and keep the back leg straight.
- Keep both feet pointing forward parallel to the imaginary line and keep the arms straight touching the ears.

Stage 2

- Lower the arms towards the ground while raising the back leg.
- Bring the back leg up and form a "T" shape.
- Place the hands on the mat while turning the body sideways.
- Put down the arm on the same side of the lead leg of the body.
- Place both hands along the imaginary line.

Stage 3

- Push off the front leg, then bring the legs up in a V shape.
- Straighten the front leg while pushing, so the legs end up in the air, pointing straight upwards.
- Balance the weight on the arms with the hands shoulder-width apart on either side of the head.
- Keep the head and torso upside down and positioned directly over the arms.

Stage 4

- Lower the lead leg while lifting the first hand off the mat.
- First, the lead leg down along the imaginary line. The first hand placed on the mat will lift naturally as the foot comes down.
- Bring the arm up by the ear to finish the cartwheel.

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Practising the Skill

Baby Cartwheel

Start with a 'baby cartwheel' by kicking around the side, then progress to kicking more vertically over the head.

Lead up Activity

Students showcase their agility and quickness as they race to perform the fastest cartwheels.

Each participant has a designated time to complete as many cartwheels as possible at a maximum speed and momentum. The student who completes the maximum number of cartwheels is declared as the winner.

Class 9
Unit 2

Sports Education

Badminton

Objective

- To teach the forehand and backhand grips while simultaneously developing fundamental footwork techniques for efficient movement.

Teaching the Skill

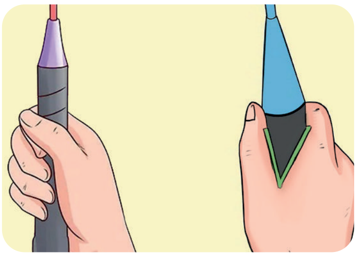
Badminton is one of the most popular racquet sports in the world. Badminton offers a wide range of benefits for people of all ages, from children to adults. By teaching badminton, we can help students to develop essential life skills, improve their physical and mental health and foster a lifelong passion for physical activity.

Teaching basics skills of badminton

Grip

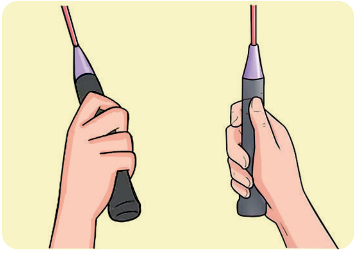
- A proper grip allows one to play the strokes efficiently. It helps gain control over shots. Generally, two basic grips are used for holding the badminton racquet.
- Teaching the correct grip in badminton is essential for players to execute shots with precision and power.

Forehand V Grip



- The player holds the racquet by the shaft in his left hand with the frame vertical to the court.
- Then the player should hold the racquet handle like a shaking hand with the right hand in which it spreads the right forefinger slightly more than other fingers for better control.
- The player should use a firm grip for power shots and looser grip for finesse shots.

Backhand thumb Grip



- Hold the racquet with the strong hand (dominant hand) with the thumb on the back of the handle and the index finger on the front.
- Wrap the middle finger around the handle, supporting the thumb and index finger.
- Place the ring finger and small finger on the back of the handle and complete the grip.

- Rotate the wrist and forearm, so that the palm faces downwards and the backhand faces the net.
- Keep the grip firm, without overtightening. It allows flexibility and control.

Service

There are two types of services :

1. Short serve
2. Long serve

Grip

- The base 'V' formed by the thumb and forefinger should be placed on the upper part of the handle.
- Then the fingers and thumb should close round the handle and grasp the racquet in the hand shake grip.
- The face of the racquet must be held in front at right angle to the floor.

Stance

- The player should stand both feet apart with the left foot a little ahead of the right foot. The racquet is taken well back by slightly bending the elbow.

Serving the shuttlecock

- The shuttle is held with the tips of the thumb and forefinger of the left hand in front of the body. As soon as the shuttle is dropped, the racquet is swung in a forward and upward movement so that it hits the shuttle below the waist level.

Follow through

- After the racquet hits the shuttle, the arm is straightened to give both force and direction to the stroke.

Forehand stroke

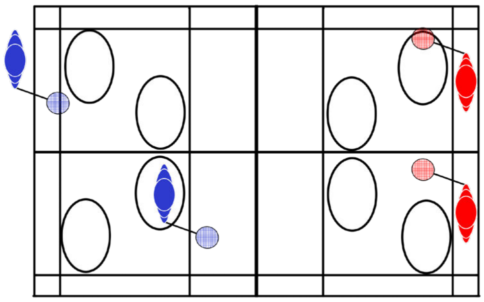
- The forehand stroke played on the right side of a right-handed player and the left side of a left-handed player.
- **Stance:** The right-handed player should keep the left foot slightly ahead of the right foot and the body should lean forward. The left-handed player has to do it and vice-versa.
- **Execution:** The racquet is moved to the side either with arm extended or elbow flexed. As soon as the shuttle falls at the waist level, the racquet is brought forward and upward for the hit.

Backhand stroke

- The back stroke is played on the left hand side of the right hand player and the right side of the left-hand player.
- **Stance:** The player should turn his body towards left side by keeping the right foot forward. The body is kept away from the shuttle so as to reach with an extended arm.
- **Execution:** Stroke When the shuttle falls low, the player takes the racket arm across the body in a bent position. As the shuttle comes down, the racquet is taken forward with arm straightening out at impact. The action is completed with wrist action. When the shuttle comes high, the racquet is swung vigorously forward with arm fully stretched. There is limited follow-through.

Practising the Skill

Activity 1: Bucket Placement Drill



- This drill focuses on precision and consistency.
- Place a bucket or a similar container in the area where you aim to land the short serves.
- Practise serving directly into the bucket.

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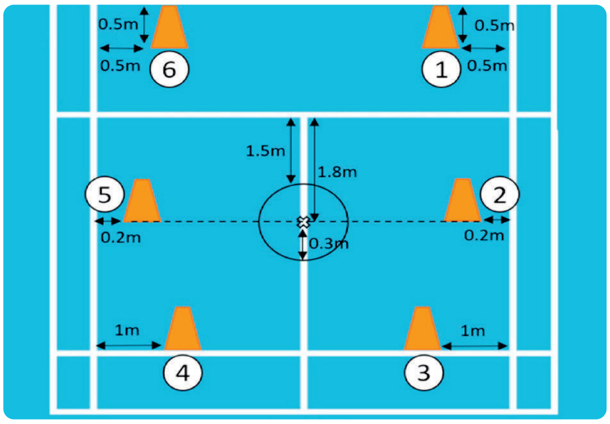
- Start close to the net to make it easier and gradually increase the distance as you improve.
- The goal is to consistently land the shuttle in the bucket.

Lead-up Activity

Passing Accuracy

Equipments: 3 Balls, 6 Cones



Cones are placed on the selected area as shown in the figure. Students are grouped into two teams of equal number named A & B. Team members get 3 chances to serve the ball into the target. Successful landing of the shuttle on the cone games one point. Team A gets a chance to serve, then team B gets a chance. The team that scores the maximum points is declared the winner.

Throwball

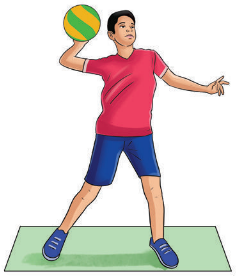
Objectives

- To develop the fundamental skills of throwball, including underarm and overarm throwing and catching.
- To improve hand-eye coordination and reaction time.

Teaching the Skill

Service

- The server should stand behind the right half of the end line.
- The ball is held with one hand and kept above the Shoulder level.
- On the whistle, the server keeps the left leg forward without touching the endline and takes the throwing arm backward and throws the ball forward.
- Serving should be done within 3 seconds from the referee's whistle.



Receiving the ball

- The receiver should catch the ball with both hands. While receiving, the receiver's legs may be on the ground or in the air.
- The receiver should take a position which is advantageous in receiving the ball.

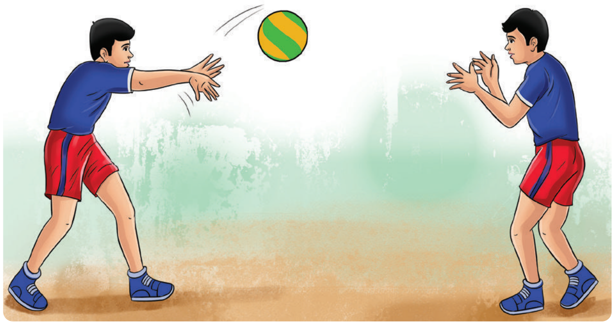
Returning the ball

- Even if the ball is received with both hands, the ball should be returned by only one hand.
- The ball should be returned from the same side where the ball is received.
- If the student receives the ball in front of his body, the throw should be made from either side. The throw should never be made below the shoulder level.
- While returning the ball, the ball should be returned within 3 seconds after receiving it.
- If the legs are on the ground while receiving, the player can jump and return the ball.
- While receiving the ball, if the legs are in the air, then the legs have to be on the ground whenreturning it.

Practising the Skill

Activity 1

Target Practice: Set up a target area on the opposite side of the net. Practise serving the ball to hit specific spots within the target. Focus on consistency and accuracy.



Activity 2

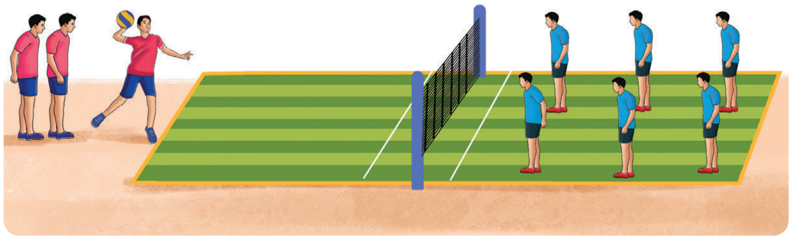
Partner Passing: Pair up with a teammate. One player serves and the other practices by receiving and returning the ball. Alternate roles are undertaken to practise partner passing.

Activity 3

Hand eye coordination: Use tennis or rubber ball. The ball is thrown at different speeds and angles. The other player catches the ball carefully while running.

Lead up game

Service - Catch and throw rally



Group the students into two teams of 6 or 7 each and name them A and B. Each team occupies one half of the court. Receiving team spread out within their half of the court. The serving team should stand behind their service line in a queue. One team serves while the opposite team receives the ball and returns. The game starts with a serve from A team (for each student three chances are given) to the B team after the teacher's whistle. After returning, the B team player should move to a new spot to receive the next pass. The receiving team must catch the ball and pass it back over the net. On completion of service by team A. B team serves and A team receives and returns the ball. Points are scored when the opposing team fails to catch and return the ball properly. The team which scores more points will be declared as the winners.

Tennis

Objective

- To teach students the fundamental skills of tennis, including ground strokes, proper forehand and backhand grips and backhand swings, to ensure they enjoy and succeed in the sport.

Teaching the Skill

Grip

There are three basic forehand and backhand grips need to learn in tennis

1. Eastern grip
2. Continental grip and
3. Western grip.

Eastern grip

Eastern grip comes naturally to most players. Hold the racquet as if shaking hands with it and place the palm of the hand at the end of the racquet. Hold in such a way that the thumb and index finger is on the right edge of the handle, forming a "V" shape. Keep the palm behind the handle and the index finger on top of the handle for the best support.

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Continental grip

Most players use continental grip when they serve. Start with an eastern grip and turn the racquet slightly clockwise. The 'V' shape made by the thumb and fingers should be on the right edge of the handle. Spread the fingers out slightly, so the thumb rests on the side of the racquet and the index finger lies right on top of the racquet.

Western grip

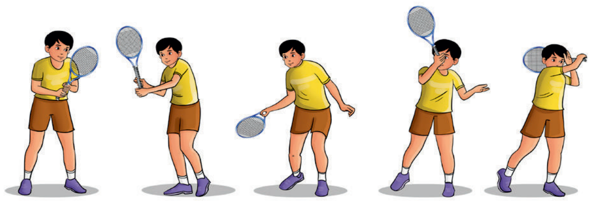
Western grip is a tough one for beginners, but after players have tried the eastern and continental grips, they can try it. It is suitable for forehand strokes. Start with an eastern grip, then loosen up and turn the racquet anticlockwise. The 'V' of the thumb should point towards the right and the wrist bends backward.

For a left-handed player, follow the same instructions for each grip using the left hand. The right edge of the racquet becomes the left edge and the left edge becomes the right.

Forehand stroke and Backhand drive

There are two types of ground strokes, the forehand stroke and backhand drive. Both are played after the ball has bounced once. Many players start with a two-handed forehand stroke and later move onto the one-handed shot when they are well versed in play.

Forehand stroke



1. Stand with the feet shoulder-width apart and knees slightly bent. Keep the eyes on the ball to react quickly.
2. Turn the shoulder to the right. Take the racquet back above shoulder height and step forward with the front foot. Keep the knees slightly bent for balance.
3. Watch the ball carefully and begin the swing. Rotate the shoulder while swinging. The arm that holds the racquet is kept relaxed and the other arm helps to maintain balance.
4. Hit the ball when it is in front of the body, so the arm can swing freely. The stroke moves from low to high.
5. While finishing follow through with the racquet over the other shoulder and watch the ball.

Practising the Skill

Drills for Forehand stroke and Backhand drive.

Shadow Drills: These drills are done without a ball and are an excellent way to monitor proper stroke production. In common game formats, the student repeats what is done by the teacher.

Net Drills : Conduct mini-games so that the students practice volleys and net shots.

Lead-up Activity

Self-Drop Forehand Stroke and Backhand Drive Relay

Organise the students into two teams. Each team has 20 balls to hit over the net. Start with a drop hit ground stroke. If the ball lands on the opposite court, the student repeats the skill with a maximum of 3 balls per student and then switches. If a mistake is made, the next student in the line takes the turn. The first team that hits all the balls is declared the winner.

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Road Cycling

Objective

- To teach the essential skills and knowledge for road cycling, including proper riding techniques, safety rules, equipment maintenance and endurance building.

Teaching the Skill

Road cycling events consist of 5 km, 10 km and 15 km races for Under 14, Under 17 and Under 19 categories respectively for both boys and girls.

Equipment

Bicycle : It is the primary equipment used by the rider to complete cycling events.

Helmet : Helmet is the very essential equipment to safe guard the head of the rider if he falls down.

Gloves : Gloves are essential to avoid corns due to the rider's hard grip on the handlebars.

Water Bottle : Rider keeps a water bottle if necessary to avoid dehydration during a long ride.

Sports Wear : Rider should wear suitable shorts and shirt for a comfortable ride. In order to avoid muscle cramps in the leg muscles, shorts or pants are mostly recommended.

Proper Handling

Competent handling of the cycle is the prime skill for the rider. One can improve it through regular practise. The rider should master the basic requirements of how to ride a cycle skilfully before taking part in competitions.

A step-by-step for holding the handlebars of a road cycle are as follows:

Grip Position: Place the hands on the hoods of the handlebars, with the thumbs on top of the hoods and the fingers wrapped around the grips.

Hand Position: Keep the hands in a relaxed position, with wrists straight and arms slightly bent. Keep the arms relaxed, with a slight bend in the elbows.

Finger Placement: Place the index and middle fingers on the brake levers, with thumbs on the top of the hoods.

Grip Pressure: To avoid excessive tension, apply gentle pressure to the grips.

Shoulder Relaxation: Keep the shoulders relaxed, avoid tension or hunching.

Wrist Angle: Keep the wrists straight, avoiding any bending or twisting.

Pedalling

Pedalling is one of the most important skills in road cycling. Flat pedalling techniques allow the rider to ride efficiently over long distances with minimal expenditure of energy.

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Pedalling Posture

- Sit comfortably on the saddle with knees slightly bent.
- Keep the back straight and core engaged.
- Relax the shoulders and arms.

Foot Position

- Place the balls of the feet on the pedals. Keep the toes pointed downwards.

Pedalling Technique

- Start pedalling with one foot, focusing on a smooth circular motion.
- Push down the pedal with the ball of the foot.
- While reaching the bottom of the stroke, bring the foot back to the top.
- Repeat with the other foot.

Pedalling Rhythm

- Focus on maintaining a consistent pedalling rhythm.
- Aim for 80-100 revolutions per minute (RPM).
- Practise pedalling in different gears to develop the technique.

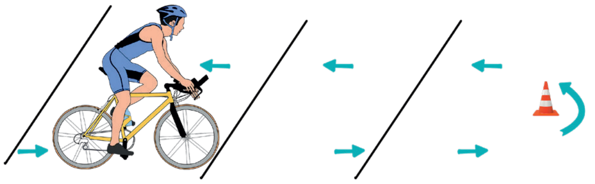
Practising the Skill

Centre Stand Pedalling Drill

- Students put a centre stand in the cycle.
- On teacher's instructions, the students start pedalling, braking and shifting the gear.

30 Metres Drill

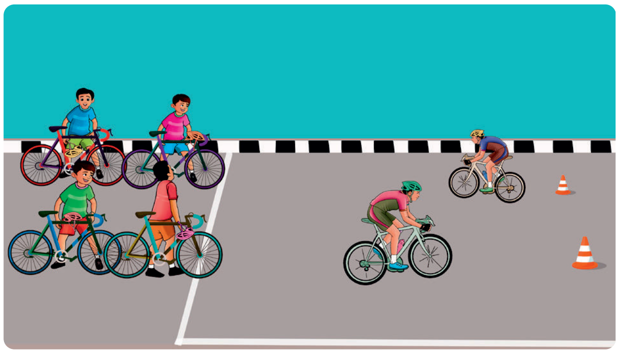
- On hearing the teacher's command, students stand pedalling at the starting point.
- After crossing ten metres, they apply the brake, then pedal again. Then, after crossing the ten metres, they shift the gear in the bicycle.
- Take a 'U' turn again. Repeat the same after crossing every ten metres and finally cross the finishing point.



Lead-up Activity

Relay Cycling

Group the students into two equal teams. Place a cone or marked line at the start and end points of the relay. After the teacher's command, the first student from both teams begin cycling from the starting position. After crossing 30 metres, they take a 'U' turn again and return by cycling upto the finishing point. Likewise, all students get a chance. The team that completes the relay first is the winner.



Squash

Objectives

- To teach proper grip, stance, forehand and backhand drive in the game of squash.
- To improve hand-eye coordination and reaction time.

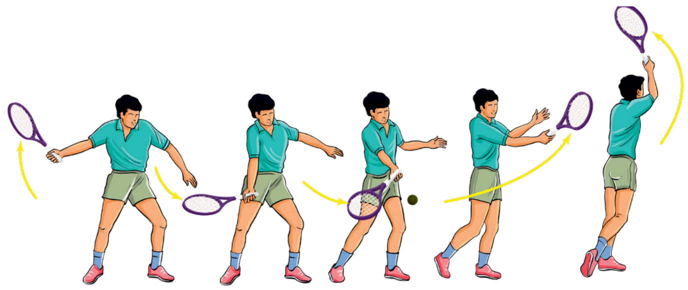
Teaching the Skill

Squash is one of the most popular sports played all over the world. In 1930, the students of Harrow School, London in England, started to play with the punctured ball against the wall. This game spread slowly to other schools. The World Squash Federation (WSF) is the international governing body for the sport of squash.

Teaching the fundamentals of squash is important for beginners to develop their skills effectively. The forehand stroke and backhand drive are two of the most essential shots in squash. Mastering these skills is crucial for the success of the game.

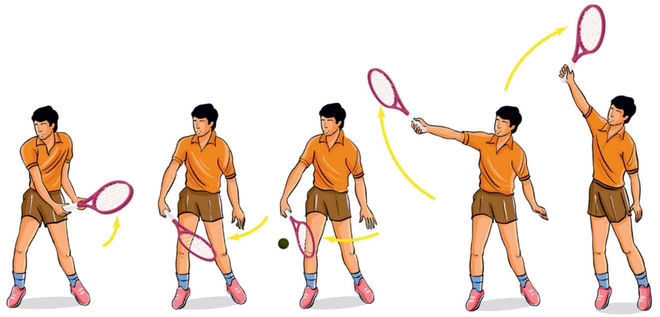
Fundamental Skills in Squash

Fore Hand Stroke



- Keep the left foot front when the ball comes at the right side.
- Turn the left shoulder to face the front wall.
- Raise the racquet in the right hand from the back.
- When the ball reaches near the knee of the front foot, swing the racquet downwards and hit the ball.
- After hitting the ball, swing the racquet upward to follow through. Be ready to hit the forthcoming ball.

Backhand Drive



- Keep the right foot front while the ball comes at the left side.
- Turn to the right shoulder, facing the front wall.
- The racquet in right hand is brought across the body and has to be swung towards the right side.
- The back side of the wrist and racquet towards the front wall.
- While the ball reaches near the right knee, bring the racquet forward and hit the ball with the back side of the racquet.
- After hitting the ball, raise the racquet towards the right side the body.
- Be ready to hit the forth coming ball.

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Teaching Tips

- **Practise with both hands:** Encourage the use of both hands for the forehand and backhand drives to improve the overall consistency and control.
- **Focus on footwork:** Move efficiently around the court to get into position for the drives.
- **Use the legs:** Generate power from the legs to hit deeper and more consistently.
- **Vary the speed and spin:** Mix up the drives with different speed levels and spins to keep the opponent guessing.
- **Practising in the game-like environment:** To improve determination self-confidence among the students.

Practising the Skill

Forehand stroke and backhand drive drill:

Hit forehand stroke and backhand drives from the front court to the back court respectively, focusing on accuracy and consistency.

Forehand stroke and backhand drive with movement:

Hit forehand stroke and backhand drives while moving forward and backward, simulating game-like situations.

Forehand stroke and backhand drive with spin:

Hit forehand stroke and backhand drives with different types of spin (e.g., topspin, backspin) to develop control and variation.

Lead-up Activity

Squash Relay:

Organise the students into two groups and line up the two teams. Place cones in front of each team at a distance of 10 metres. When the teacher gives the command, first student in each team should run towards the cone and after reaching the cone do the action of performing a service. Then, run back and touch their teammates. All the players have to do this continuously. That team that completes first is the winner.

Finishing Technique in Running

Objective

- To develop proficiency in executing various finishing techniques in running such as the drop finish, shoulder shrugging and run-through techniques.

Teaching the Skill

Students' gain the proficiency in executing various finishing techniques, such as the run-through, drop finish and shoulder shrugging techniques. It helps them to finish races effectively and efficiently.

Finishing technique: The athlete whose torso reaches the vertical plane of the finishing line is the winner.

Torso: Torso is distinguished from the head, neck, arms, legs, hands and feet.

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Types of Finish

Athletes use the following three methods for finishing races:

1. Chest or Lunge or Drop finish
2. Shoulder shrugging finish
3. Run through finish

1. Chest or Lunge or Drop finish:

In this type of finish, when the finishing line is just one step ahead, the athlete brings both arms backward and tries to touch the tape on the finishing line with the chest.

2. Shoulder shrugging finish:

In this type of finishing, the athlete shrugs his opposite shoulder by turning the chest sideways and touches the tape at the very last movement.

3. Run through finish:

In this type of finish the athlete, without considering the finishing point, reaches the destination at full speed as it is.

Practising the Skill

1. Explain the Finishing Techniques:

- Introduce the three main finishing techniques: chest/lunge/drop finish, shoulder shrugging and run-through finish.
- Clearly describe the mechanics and execution of each technique.

2. Demonstrate the Techniques:

- Perform a live demonstration of each finishing technique to the students.

3. Progression of Practice:

- Start with a walking practice, where the teacher can call out a technique and have the students perform it.
- Progress to jogging practice and gradually increase the speed.
- Finally, have the students run a short distance (20-30m) and execute the finishing technique at the end.

4. Feedback and Correction:

- Closely observe the students as they practise the techniques and provide them with immediate feedback.

5. Variation and Competition:

- Introduce variations, such as having students choose their own technique or calling out a specific one.
- Consider setting up a mini-competition where students race and demonstrate the finishing techniques.
- Celebrate successful executions and provide positive reinforcement.

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Lead-up Activity

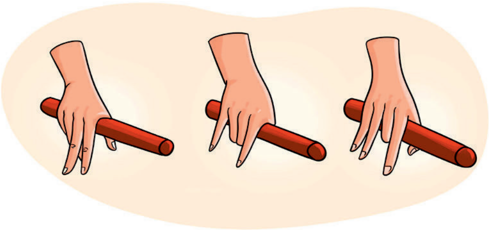
Mark 6 lanes, each 30 metres long. Organise all the students into groups of 6. Hold a running competition for each group. Competions are to be conducted on for the all the three techniques. Students who complete the race with proper finishing techniques are declared the winner.

Baton Exchange (Non-Visual)

Objectives

- To teach students the proper method of non-visual baton exchange using the down sweep technique in the 4x100m relay.

Teaching the Skill



The non-visual baton exchange using the down sweep technique in the 4x100 m. relay involves the outgoing runner extending their hand backward, palm facing up, without looking back. The incoming runner, approaching at high speed, places the baton into the outgoing runner's hand with a downward sweeping motion. This method relies on precise timing and coordination to ensure a smooth and efficient transfer, minimising the risk of dropping the baton and maximising the speed.

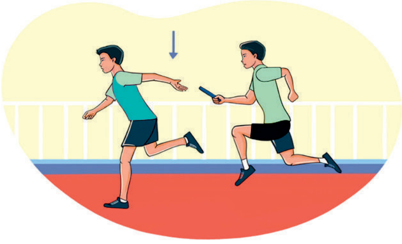
Starting Positions of the 1st Leg :

The first athlete uses a sprint start and has to modify the right hand position to hold the baton securely. The athlete has the following options for holding the baton.

Types of Non-Visual Exchanges:

There are three types of non-visual exchanges

1. Push Pass
2. Upsweep
3. Downsweep



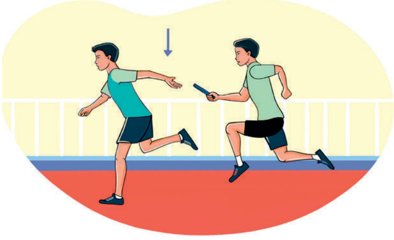
1. Push Pass Technique

- The push pass relay baton exchange is a safe exchange technique used in relay races. The incoming runner pushes the baton in the palm (facing upward) of the outgoing runner. The outgoing runner feels the push and grabs the baton safely.

2. Upsweep Technique: Given in standard 7.

3. Downsweep Technique

- This is a non-visual exchange in which the baton is placed in the upturned palm of the outgoing runner by the incoming runner.
- The awaiting runner holds the arm, with palm facing up in a "V", with thumb positioned towards the body. This technique is the most popular among the relay exchanges.
- The baton is placed "down" on the awaiting runner's palm.



Lane and Baton position of incoming runner

- The lead off runner or first leg runner has the baton in the right hand and stays on the inside of the lane.

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- The second leg runner stays on the rightside of the lane to receive the baton by downsweep in the lefthand.
- The third leg runner stays on the lefttside of the lane to receive the baton by downsweep in the righthand.
- The fourth leg runner stays on the rightside of the lane to receive the baton by downsweep in the lefthand.

Practising the Skill

Out-Going Runners' Action

The athletes do arm action in a stationary position. On hearing the teachers whistle, the students extend their right hand backward. Students to practise downward exchange by downsweep technique.

Incoming Runners' Action

Athletes practise baton exchange in a stationary position. The athletes do arm action with relay baton in a stationary position. On hearing the teachers whistle, the students extend their hand forward with baton.

On the spot baton exchange

Organise the students in fours. The first athlete holds the baton in the right hand and all the student should do arm action. The second athlete extends his left hand backward. Place the baton and continue the action. Next the second athlete gives the baton to the third athlete's right hand. The third athlete hands over to the left hand of the fourth athlete.

- Baton exchange with walking.
- Baton exchange with jogging.
- Baton exchange with running.
- Fix the check mark and practice with running and baton exchange.
- Through a trial-and-error method, confirm the checkmark.

Lead-up Activity

Draw the track within the available area or draw a circle like track with at least a 10m radius. Organise the students into four groups and conduct the relay race. The winners are decided based on the race results.

Baton Exchange (Visual)

Objective

- To teach and train the students, the visual method of baton exchange for 4x400m Relay race.

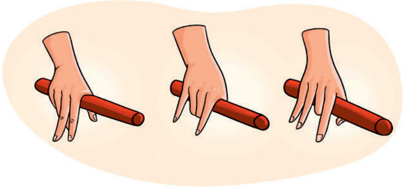
Teaching the skill

The visual method of baton exchange is crucial for success in the 4x400m relay race. This technique involves the outgoing runner watching the incoming runner and receiving the baton through visual cues rather than touch. Mastering this method ensures a smooth and efficient handoff, which is essential for maintaining the speed and momentum throughout the race.

Starting Positions of 1st Leg

The first athlete has to hold the baton securely and use the following techniques in the sprint events.

Visual Technique



- Outgoing runner faces the inside of the track and extends the left arm out to receive the baton.

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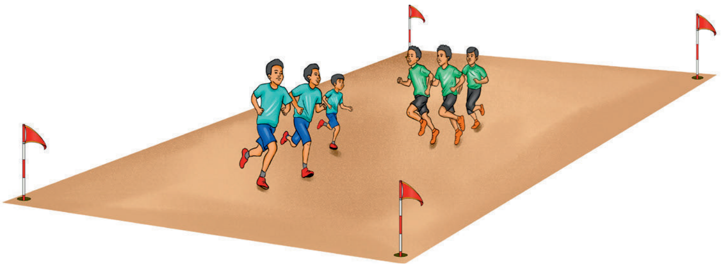
- Outgoing runner accelerates to match the speed of the incoming runner and receives the baton.
- Incoming runner holds the baton upright with the right hand and reaches towards the outgoing runner.
- Outgoing runner takes the baton with the left hand and changes it immediately to the right hand.
- The main responsibility for an effective exchange in the 4 x 400m relay lies with the outgoing athlete.

Practising the Skill

- Group the students into two's. Group moves in pairs randomly within a 40 m x 40 m area, one baton for every two athletes.
- Work in pairs, practise visual exchanges within a 20 m exchange zone.



Lead Up Activity

Utilise the available area to draw clear exchange zones for each of the four relay legs. Organise the students into four equal groups, with each group consisting of four runners. A runner should be made to stand in each zone and on the starting signal, the first runner begins the race, using the visual method to exchange the baton within the designated exchange zones. Likewise the second and third runner receives the baton with left hand and gives it with the right hand. Continue until all the runners have completed their legs. The group that finishes first is the winner.

Pole Vault

Objective

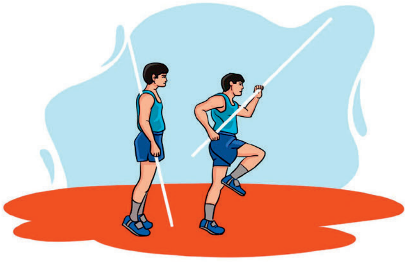
- To teach and train the students the skill of pole vaulting.

Teaching the Skill

Pole vaulting is a dynamic and challenging event that combines speed, strength and technique. The objective is to teach and train the students the essential skills of pole vaulting, focusing on proper form, safety and effective techniques. Through a series of drills, practices and competitions, students develop the confidence and ability to excel in track and field events.

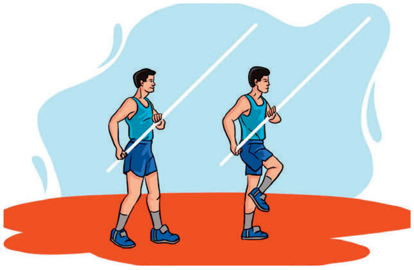
Grip and Carry

- Hands are shoulder-width apart. Place the left hand close to the top of the pole. Right hand close to the bottom of the pole.
- Both arms are bent, the right hand is close to the hip.
- The tip of the pole is above head height.
- The elbow of the left arm points to the side of the ground where the student plants the pole.
- The upper body is upright.



Approach

- The approach is active and with gradual acceleration.
- The elbows are relaxed; the pole should not disturb the approach.
- The pole is held obliquely forward, then it is carried horizontally during the run.



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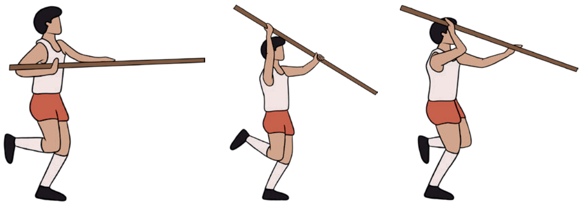
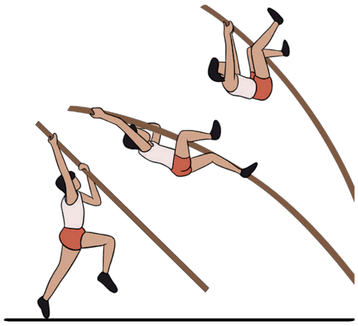
Pole Planting



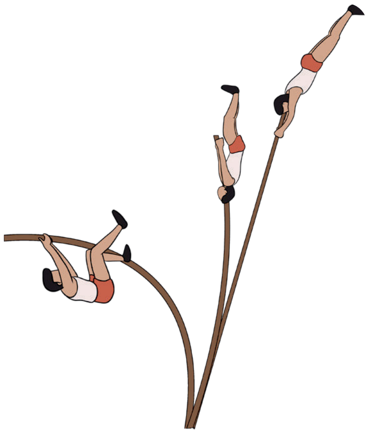
- Tip of the pole is lowered gradually and smoothly in the last third of the approach.
- The plant commences on the penultimate contact of the left foot with a forward push of the pole.
- The right arm is raised quickly, the hand pushing close to the head at the contact of the right foot.
- The body is upright with the shoulders parallel to the foam bed.

Take off



- The foot plant is active and on the entire sole.
- The body is completely stretched with the right arm fully extended.
- The upper (right) hand is directly above or in front of the take off foot.
- The thigh of the free leg swings actively forward.

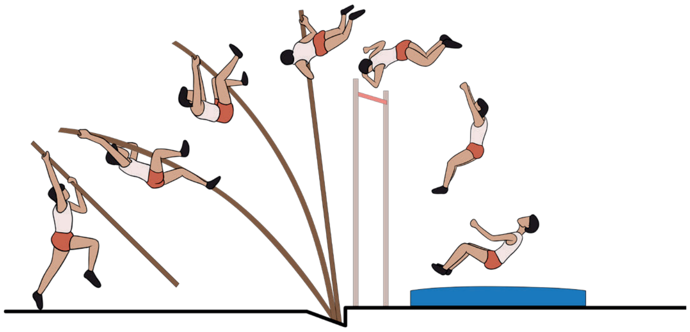
Bar Clearance and Landing



- The body moves from the 'L' to the 'I' position.
- The right arm is extended, left arm bends with the elbow on the right side of the pole.
- Hips pass close to the pole.
- The turn is commenced with the pull of both arms. The body turns to face the bar.
- Push-off from the pole is with the right arm.
- The bar is crossed in an arched (1) or bent (2) position.
- The body is straightened after crossing the bar.
- Landing is on the back.

Practising the Skill

Grip and carry the pole



- Place the right hand close to the top of the pole.
- Place the left hand about 50 cm down the pole.
- Keep right hand close to the hip.
- Start with walking.
- Proceed to easy running and sprinting.

Step into Swing

- Hold the pole above the head. Use a three stride approach (Left – Right – Left).
- Take off from the left foot (right-handed vaulters).
- Drive free leg forward and upward.
- Pass the pole on the right side.
- Land on the left leg or both feet without turning.

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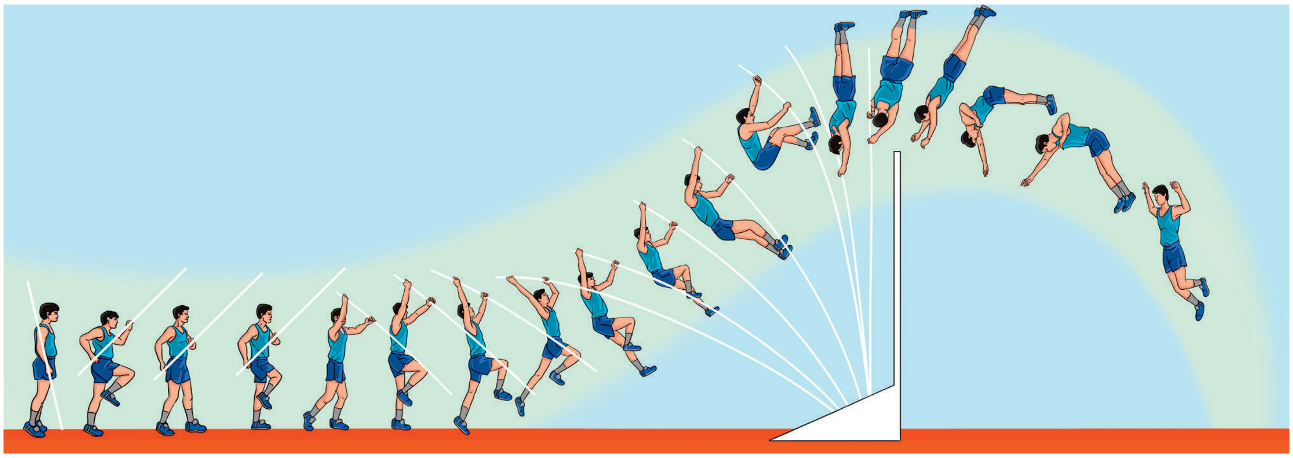


Plant and Vault

- Practise the pole plant.
- Plant the pole first by walking and then by jogging.
- Use a 5-7 stride approach. Take off, swing and turn.
- Land on both feet.

Lead Up Activity

Briefly review the key pole vault techniques with the students, including grip, approach run, plant, takeoff and bar clearance. Set up the pole vault pit with the appropriate safety measures in place. Establish starting heights for different skill levels to ensure that all the students participate. Student who crosses the highest height is declare the winner.

Javelin Throw

Objectives

- To teach students various grips used in javelin throwing.
- To train students to execute the javelin throw techniques perfectly.

Teaching the Skill

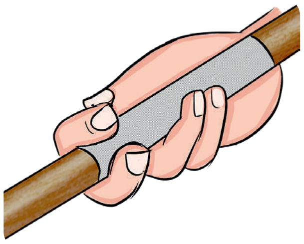
Teaching different grips

The American grip:

For this grip, place the thumb and the first two joints of the index finger behind the cord. Wrap the hand around the pole normally, except the index finger which is extended a bit more in comparison to the other fingers.

The Finnish grip:

For this grip, place the thumb and the first two joints of the index finger behind the cord, while the index finger supports the shaft of the pole. This is like the American grip, except that the index finger is extended further away and the middle finger is a bit away from the ring and little finger.



The "V" or Pen or Fork grip:

For this grip, hold the javelin between the index and middle fingers, behind the cord.

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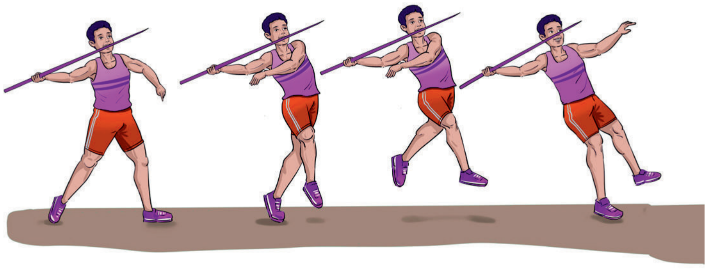
Approach Run

- Beginners run towards the target with the javelin. They take 9 to 14 steps. Keep the hip high and run on the balls of the feet.
- Let the free arm swing across the body. Flex the arm carrying the javelin to fix its position.

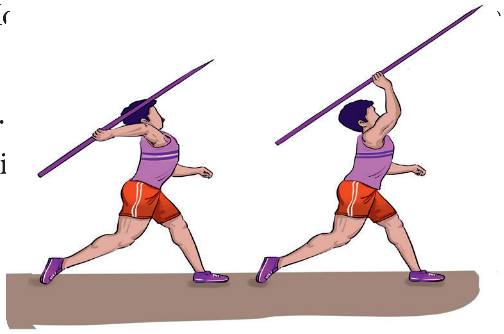
Withdrawal or Transition or Crossover

- In the "lean-back" position put the right foot ahead of the centre of gravity. The javelin is pulled back a little further so that the tip is lined up with the eyebrows.
- Keep the right foot close to the ground.
- Let the right heel touch the ground.
- As the right foot moves forward, move the left foot up and lean the trunk back at a 115-degree angle. This phase is finished when the right foot is on the ground and the left leg is forward and elevated.



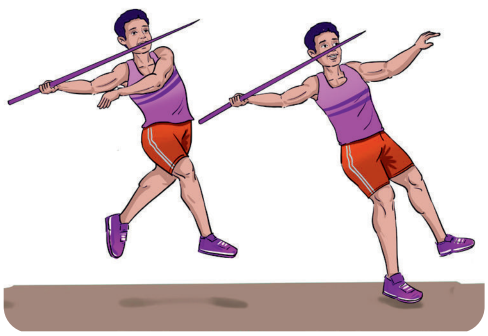
Impulse or Pre -Delivery Stride

- This step is taken just before the throw of the javelin. M shoulders and hip towards the target.
- After the left foot touches the ground, straighten the torso.
- Turn the face towards the direction of the throw. The javeli
- Position the throwing hand above the shoulder level.
- It is the longest stride of the javelin run-up.



Release or Delivery

- Placement of left foot is active and solid.
- The left side is stabilised.
- The trunk is raised and there is a turning movement around the left leg.
- The muscles in the front of the body are highly pre-tensed in the 'Arc Position'.
- The throwing shoulder is pushed forward.
- The throwing elbow turns inward, the palm remains up.
- Right elbow draws forward and upward alongside the head.
- Trunk moves forward.
- Throwing elbow straightens explosively.



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- Left side of the body is blocked by a solid left leg and the bent left elbow is close to the trunk.
- Right foot maintains ground contact until the javelin is released. Right foot turns on its outside edge and is dragged behind.
- Trunk leans slightly to the left, the right shoulder is directly over the left foot.
- Throwing arm should be as close to vertical and as possible at release.

Practising the Skill

Step by step techniques

1. Stance:

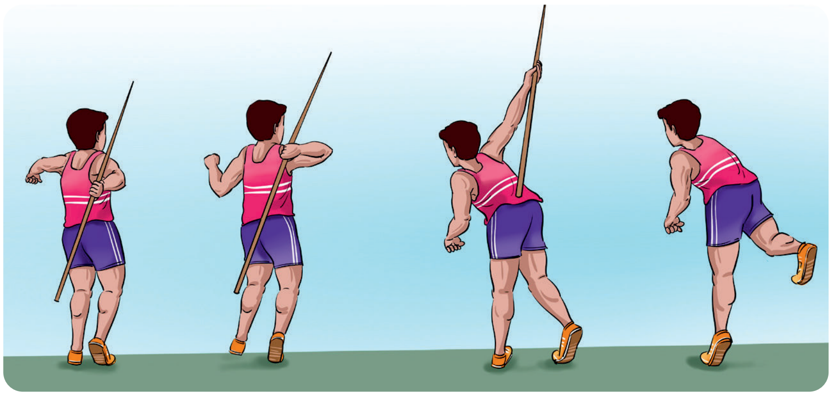
- Stand with both feet tightly together, facing the direction of the throw.
- For right-handed throwers, step forward with the left foot.

2. Pulling Back the Javelin:

- Pull the javelin back with the shoulder, keeping it parallel to the ground.
- Maintain the "T-position" - the javelin should be facing straight towards the throw direction.
- Keep the palm under the javelin throughout the pulling back motion.
- Bend the elbow slightly, keeping the tip of the javelin at eye level.

3. The Throw:

- Without pulling the javelin down towards the shoulders, throw it violently forward.
- Maintain a high hand position throughout the throw.
- Ensure a good forward drive from the right side of the body.



4. Non-Throwing Arm:

- Place the non-throwing (left) hand in front of the body during the throw.
- After the throw, the left hand should drop and swing back towards the body.
- "Block" the left hand as it swings back.

5. Body Positioning:

- Position the body behind the left foot during the throw.
- Ground the left leg firmly into the ground to create a strong base.
- Avoid pushing the right leg forward; instead, bend the knee in the direction of the throw.

Practice and Feedback:

- Allow students to practise the technique step-by-step, providing feedback and corrections.
- Encourage them to focus on proper form and technique rather than distance.
- Gradually increase the intensity and speed of the throws as students gain confidence.

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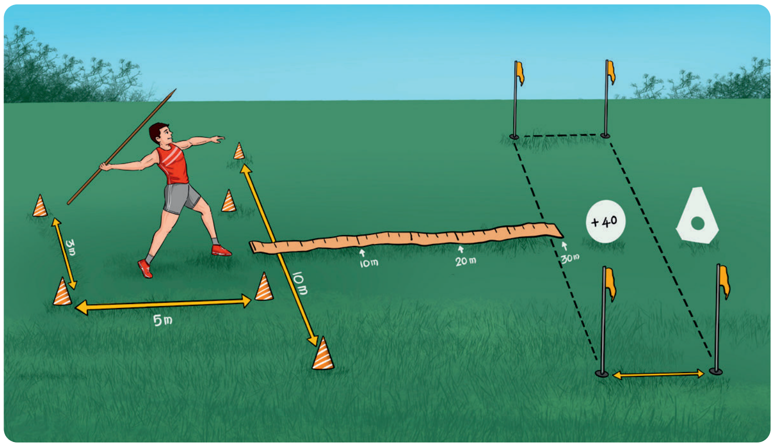
Lead-up Activity

Organise the players into two equal groups and line up on the runway. Each player throws the javelin in the marked area. The distance covered by each player is measured and marked. The team who covers the maximum distance wins. This activity helps players to develop their throwing skills, practice coordination and build teamwork and a competitive spirit.



Class 9
Unit 3

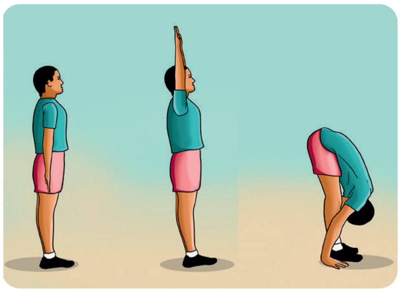
Asanas and Breathing Techniques

Asanas

Objective

- To enhance physical development, flexibility and mental relaxation through Asanas and Breathing techniques.

Padhahasthasana



Starting Position

1. Stand erect.
2. Inhale and raise both arms sidewards above the head.
3. Exhale and bend forward. Keep the palms facing sides of the feet (Stay in the same position for 10 to 20 seconds).
4. Inhale and back to Count No.2.
5. Exhale and back to Count No.1.

Ardha Chakrasana (Half moon pose)

Starting Position

1. Stand erect.
2. Support the lower part of the waist with both hands.
3. Inhale and bend the head backwards, until a stretch in the neck muscles is felt. (Stay in the same position for 10 to 20 seconds).
4. Exhale and back to Count No.2.
5. Return to the original position.

Vyaghrasana (Tiger Pose)

- First, sit in the Vajrasana position.
- Place both hands and feet on the floor, equally spaced. The body should be kept in a "⅃" shape.

- Breathe in and lift the right leg backward, keeping the head upright. Hold the breath.
- Bring the right leg forward between the two hands and touch the head.
- Repeat this position, alternatively.

Gharbasana

- Sit in the Padmasana position.
- Place both hands between the legs while sitting.
- Fold and cross the hands, placing them near the ears.
- Inhale slowly and control breath.
- After some time, return to the starting position.

Poorna Chakrasana

Posture : Full Wheel Pose

Position : Standing Position

Procedure:

Inhale and stand up straight. Raise hand arch back and bend the head backward position hand in the floor. Grasp each ankle one by one with respective hands. Hold position in 30 seconds finally breathe normal. Relax and slowly return to the starting position.

Benefits:

- It stretches and strengthens the whole body.
- Reduce the low back pain and strengthens the back.
- It increases the lung capacity.

Breathing Techniques

Abdominal Breathing

1. Close eyes and relax body.
2. Put one hand on belly.
3. Inhale slowly through nose and feel the abdomen expand.
4. Exhale slowly through mouth and feel the lower abdomen contract.
5. Continue to breathe deeply and focus on the expansion (rising) and contraction of the abdomen.

Intercostal Breathing

Intercostal breathing involves using the muscles between the ribs (intercostals muscle) to expand ribcage and increase the volume of air inhaled. This type of breathing helps to improve lung function and oxygenation.

1. Close eyes and relax body.
2. Rest hands lightly on the sides of the ribcage.
3. Breathe in deeply, focusing on expanding ribcage outward.
4. Notice the ribs moving apart as breathe in.
5. Breathe out slowly, allowing ribcage to contract gently.
6. Continue breathing deeply, focusing on the movement of ribs.

Class 9
Unit 4

Exercise Nutrition and Drug Abuse

Objectives

- To understand the basic food energy.
- To create awareness that vitamins and minerals are essential for the functioning of the body.

The food we eat should be safe and rich in all the nutrients our body needs. We should choose from a wide variety of foods and we should eat them regularly, every day.

Nutrition

Nutrition is the process of ingestion, digestion, absorption, transportation and utilisation of nutrients for the well being of the body. It is the process of providing nourishment to the body for a healthy life.

Nutrient

A nutrient is a component in foods that an organism uses to survive and grow. A substance in a suitable amount is essential for the growth, maintenance, function and reproduction of a cell or organism is called a nutrient.

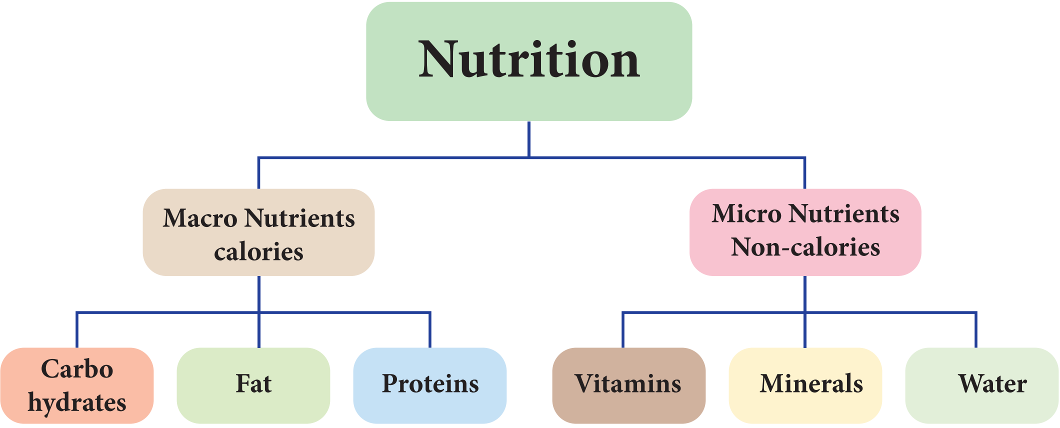
Nutrients consist of carbohydrates, fats, proteins, vitamins and minerals.

Exercise Nutrition

Exercise nutrition is the foundation of success in sports. A well-designed nutrition plan allows active children and sports person to perform at their best. It is unique to each person and is planned according to individual goals.

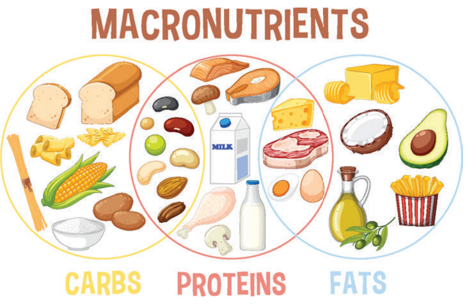
Exercise nutrients are classified into:

- Macro Nutrients
- Micro Nutrients



Macro Nutrients

Carbohydrates, Proteins and Fats are classified as major nutrients and has caloric value.



Carbohydrate

Carbohydrates are the main source of energy for our body and for all sports activities. It provides quick energy to the body. The food that contains carbohydrates are converted into glucose or blood sugar during the process of digestion.

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According to NIN (National Institute of Nutrition) dietary guidelines,

- 45% to 65% of daily calories should come from carbohydrates.
- Carbohydrates provides **4 calories** of energy per gram.

Sources of Carbohydrate rich food

- Whole unprocessed grains such as rice, wheat, millets and oats.
- Fruits
- Vegetables.

Role of carbohydrate in sports

- Carbohydrates are a primary energy source during exercise.
- Carbohydrates are stored in muscle and liver as glycogen. During high-intensity exercise, muscle and liver glycogen is broken down to provide energy.
- Consuming carbohydrates before, during and after exercise can sustain performance and aid recovery.

Protein

Proteins are the essential nutrients and also the building blocks of the body. They are essential for growth and repair of body cells and tissues. Proteins are made up of amino acids.

According to NIN (National Institute of Nutrition) dietary guidelines

- 10% to 15% of daily calories should come from proteins.
- Protein provides **4 calories** of energy

Sources of protein rich food

- The best sources of complete proteins are eggs, milk, meat, poultry, beef and milk products.
- Complete plant proteins are wheat cereals, corn and all variety beans, pulses, lentils.

Role of Protein in sports

- During prolonged activities, proteins provide energy.
- Protein supports muscle growth and repair, which is vital for Sports person who engage in intense training.
- Adequate protein intake aids in post-workout recovery.
- For building and maintaining muscle mass, an overall daily protein intake in the range of 1.4 – 2.0 g protein/kg body weight/day is sufficient. (For example: An athlete who weighs 50 kg has to intake 70 g to 100 g of proteins per day.)

Fat

Fat is a necessary component of a healthy diet to provide energy and essential fatty acids and to facilitate the absorption of fat-soluble vitamins.

According to NIN (National Institute of Nutrition) guidelines

- **20% to 25%** of daily calories should come from fat provides
- Fat provides **9 calories** of energy per gram

Fat rich food

- Fat rich food are classified into two
- **Saturated Fats (Bad fat)** comes from red meat, butter, oil and cheese.
- **Unsaturated Fats (good fat)** comes mainly from vegetables, nuts and fish.

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Role of Fat in sports

- Fats are the primary fuel for light to moderate intensity exercise.
- During prolonged lower intensity exercise, fats can provide more than twice the amount of energy per gram (9 calories per gram) than carbohydrates or protein.
- Fats are essential for the production of some hormones that regulate metabolism, muscle growth and recovery.
- Fats act as a cushion for organs such as the heart, lungs and kidneys, protecting them from injury.

Micro Nutrients

Vitamins and minerals are called micro nutrients or minor nutrients. Minor nutrients are required in small quantities but they are essential for good nutrition.

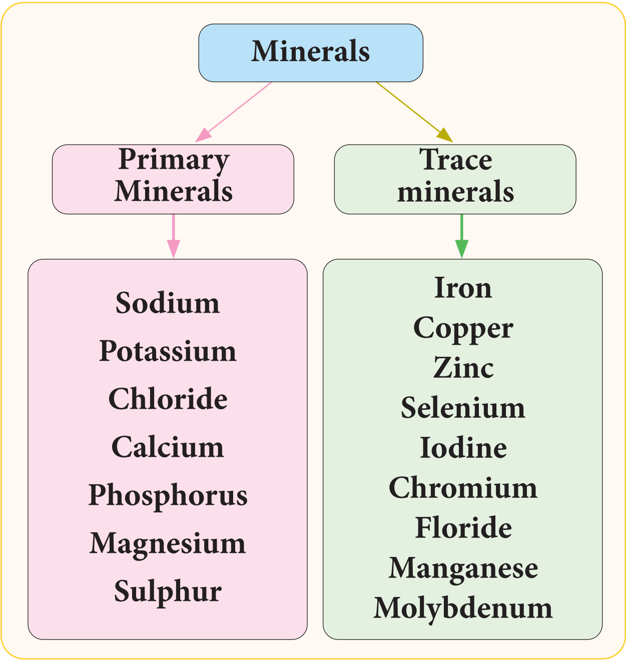
Vitamins

Vitamin is an organic substance that is essential in small quantities for normal health and growth in human/animal life.

Vitamins are classified into two groups

1. **Fat soluble vitamins:** They are Vitamins A, D, E and K
2. **Water soluble vitamins:** They are Vitamins of B group and Vitamin C.

Each vitamin has a specific function and its deficiency leads to a particular deficiency disease.



Minerals

Minerals are very essential for proper growth and functioning of our body and are required in small amount.

Primary Minerals: To maintain good health primary minerals are essential. The intake of primary minerals should be around 5 g per day.

Trace Minerals: Trace minerals are also called micro minerals. The intake of trace minerals should be less than 5 g per day. It is essential for the normal functioning of the body.

Role of minor nutrients in sports

- Micro nutrients play a crucial role in sports performance.
- Micronutrients are essential for optimising athletic performance and supporting adaptation to training.
- Athletes often use micronutrient supplements to correct vitamin and mineral deficiencies, improve immune function, enhance recovery and optimise their performance.
- Vitamin B12 is needed to repair damaged cells as well as to synthesise new ones, especially red blood cells.

Water

Water is a nutrient and it makes up almost 70 per cent of our body weight. We need water to break down complex food molecules, transport food, chemicals and gases throughout the body. It acts as the medium for biochemical reactions and is also required to eliminate the wastes like urine and sweat.

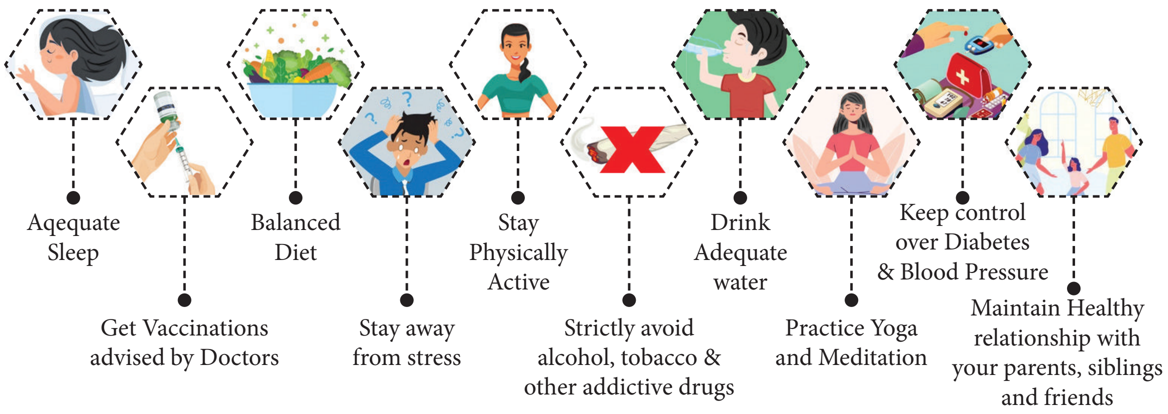
Immune system and sports

"Excellent nutrition is the backbone of maintaining good health and a strong immune response throughout life" says Demetre.

The immune system is a network of cells, tissues and organs that works together to defend the body **against attacks by foreign invaders** such as bacteria, viruses, parasites and fungi.

Way to build a strong immune system:

Ways to Boost Your Immunity



Role of Sports in Increasing Immunity

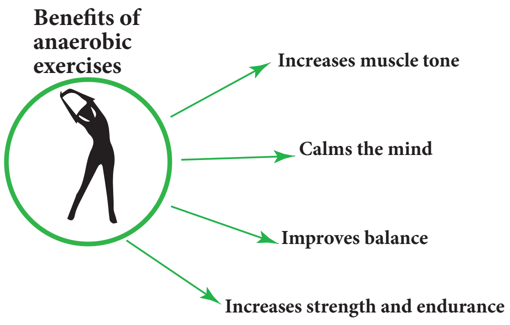
- Exercise lightens the body.
- Fat loss occurs.
- Internal organs gets strong
- Laziness disappears.
- Fatigue, nausea, thirst, the temperate environment is tolerated and health remains good.

Anaerobic exercises

Anaerobic exercise means exercising in the absence of oxygen. Anaerobic exercises are short-duration, but high-intensity activity.

Some examples of anaerobic sports and exercises:

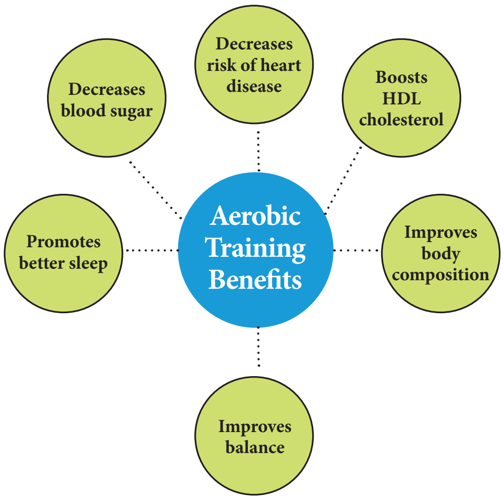
- Sprint
- Powerlifting Exercise
- Plyometric Exercise
- Rowing



Aerobic exercise:

Aerobic exercise means exercising with the presence of oxygen. Aerobic exercise refers to any activity that uses large muscle groups, it can be performed continuously for a long period of time and generally is rhythmic and moderate in nature. During aerobic exercise, energy supply is maintained for a longer period of time.

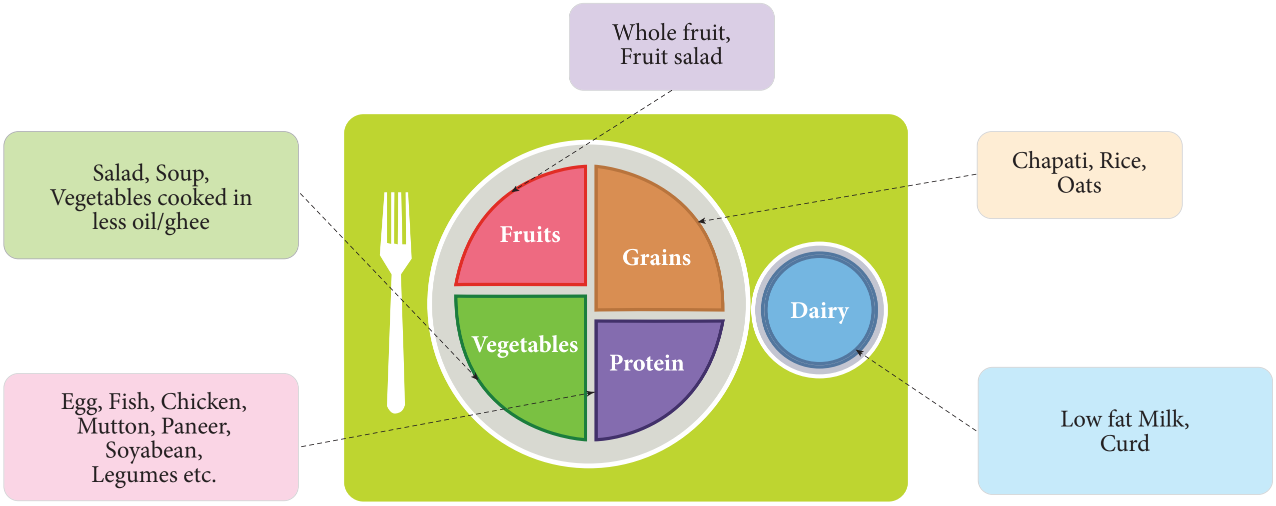
Some examples of aerobic sports and exercises



Athlete's Plate

The athlete's plate is a visual representation of balance diet. It emphasises the ideal proportions of different food groups.

Concept of the athlete's plate simplifies meal planning and ensures that athletes receive the necessary nutrients for optimal performance.



Drug Abuse in Sports

The use of drugs to enhance sports is considered unethical.

Drug abuse in sports among school children refers to the misuse or improper use of performance-enhancing substances or recreational drugs by students involved in sports activities. This issue not only poses health risks to the young athletes but also undermines the principles of fair play and sportsmanship.

The drug testing is primarily governed by the National Anti Doping Agency (NADA) at the National level and the World Anti Doping Agency (WADA) at the International level.

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Doping

The International Olympic Committee defines doping as "the use of a substance or technique to illegally improve athletic performance". The use of drugs or other substances for performance enhancement has become an important topic in virtually every sport and has been discovered in athletes of all ages and at every level of competition.

Types of Drugs Abused in Sports

Performance-enhancing drugs such as anabolic steroids, human growth hormone stimulants, depressants are often used to enhance physical performance, increase muscle mass or improve endurance. The usage can lead to serious health consequences, including stunted growth, hormonal imbalances, cardiovascular problems and psychological issues.

Some kinds of drugs are

1. Stimulant
2. Anabolic Steroids
3. Human Growth Hormones and Peptide Hormones
4. Blood doping and Epo
5. Beta Blockers
6. Diuretics

Class 9
Unit 5

Integration of Physical Education with Other Subjects

Objective

- To enable the students to understand the integration of physical education with other subjects.

Integrating physical education with academic subjects like language, science, mathematics and computer science enhances holistic learning, boosts cognitive abilities and academic performance. Interdisciplinary connections foster creativity and problem-solving, make learning engaging and relevant. This approach cultivates transferable skills such as teamwork and communication while advocating for the importance of physical activity in overall student well-being.

Language Integration in Physical Education:

Language is crucial in physical education, enhancing communication and cognitive development. Teachers use it to question, direct, explain and stimulate critical thinking. Students respond by discussion and explaining ideas. Integrating language skills boosts communication, critical thinking and self-expression, aiding physical and intellectual growth. It also supports social development as students collaborate, build teamwork and leadership skills.

Listening: Incorporate various engaging activities into physical education classes. Start with verbal instruction follow-along for exercises like jumping jacks. Utilise vocabulary audio identification by playing sports-related words for recognition.

Speaking: Engage students in speaking activities to enhance communication skills. Encourage exercise description with accurate vocabulary. Facilitate question-and-answer sessions on activities. Assign student-led warm-ups to explain movements. Organise debates on sports events' societal impacts. Conduct role-plays as sports reporters, focusing on event highlights.

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Reading Activities: Engage students in reading activities to enhance comprehension and vocabulary. Have them read aloud written instructions for activities. Utilise vocabulary matching cards for exercise names and descriptions. Employ flashcards with fitness terms for pre-activity reading.

Writing Activities: Engage students in writing tasks to foster language skills and deepen sports understanding. They write exercise steps and journal entries, focusing on vocabulary. Compose sentences using lesson-related terms. Assignments involve researching sports history, comparing intramural vs. extramural sports.

These activities merge physical education with language development, offering a comprehensive approach to learning while enhancing knowledge of global sports events.

Integration of Physical Education in Teaching Mathematics

The integration of physical education in teaching mathematics offers a dynamic approach to learning that bridges the gap between academic subjects and physical activity. Through games, challenges and structured exercises, students develop mathematical skills such as spatial reasoning, measurement and problem-solving in a practical and enjoyable context. This interdisciplinary approach not only enhances mathematical proficiency but also fosters a holistic understanding of the interconnectedness between physical and mental well-being.

Measuring and Estimating

- Measure the length and width of a basketball court or soccer field. Calculate the area and perimeter.
- Estimate the height of a basketball hoop or volleyball net. Measure the actual height and compare it.

Probability and Statistics

- Collect data on the number of goals scored in a soccer game. Calculate the probability of a team scoring.
- Track the number of strikes and balls in a baseball game. Determine the probability of a batter getting a hit.

Geometry and Angles

- Identify different angles formed by the positions of players in a basketball game. (e.g., 90° angles at the corners of the court)
- Examine the trajectory of a football pass or a tennis serve, hitting the ball in cricket and find out the angles involved.

Measurement and Unit Conversion

- Convert the length of a swimming pool from metres to feet or yards.
- Calculate the speed of a sprinter in meters per second and miles per hour.

Graphing and Data Analysis

- Plot the heights and weights of players on a scatter plot to analyse trends.
- Construct a bar graph comparing the number of medals won by different countries in the Olympics.

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Integrating Physics in teaching Physical Education

1. Projectile Motion Experiment
2. Newton's Law Relay Race
3. Lever Mechanics Challenge
4. Balance Board Centre of Mass Activity
5. Linear Motion (Sprinting Technique)
6. Circulatory Motion (Swimming Stroke)
7. Centripetal Force (Basketball Dribbling)
8. Centrifugal Force (Tennis Swing Analysis)
9. Linear Momentum Transfer (Soccer Passing Drill)
10. Circular Momentum Transfer (Gymnastics Routine)
11. Circular Motion in Hula Hoops
12. Friction and Drag Relay Race

These activities merge physical movement with fundamental physics principles, providing hands-on experiences that reinforce scientific concepts while promoting active learning and engagement in physical education.

Integrating Chemistry in teaching physical education

Chemistry is essential for athletes as it underpins various physiological processes, from energy production to muscle function and recovery. Understanding basic chemistry principles can help athletes optimise their training, performance and recovery.

Integrating Biology in teaching physical education

Understanding biology is crucial for athletes as it helps them comprehend how their bodies function during physical activity, how to optimise performance and how to prevent injuries.

Integrating social science into physical education

Integrating social science into physical education provides opportunities for students to explore the sociocultural aspects of sports, including history, sociology and psychology.

The following activities show the integration of social science into physical education.

1. Historical Perspectives on Sports (Timeline Activity)
2. Sociological Analysis of Sports (Team Dynamics Observation)
3. Psychological Aspects of Sports (Mindfulness and Performance)
4. Cultural Exploration through Traditional Games
5. Ethical Dilemmas in Sports (Case Study Discussions)
6. Gender and Sports Equity

Students can gain a broader understanding of the social dimensions of sports and develop critical thinking skills to analyse and reflect on the sociocultural aspects of physical activity.

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Annexure

Taekwondo

Taekwondo is a modern martial art which originated in Korea. There have been physical conditions involving the use of the hands and feet for purposes of self-protection. Taekwondo was refined and redesigned with Chinese and Japanese techniques in similarity to Taekkyon in 1955 and named it "Tae Kwon Do". In 1960's, Taekwondo became popular throughout the world.

Fundamental Skills

Hand movement/fist skill: There are two types of hand movements. The first is jerking, an offensive technique. The second is blocking, a defensive technique. In defensive technique the closed fist is used and the front parts of the fingers are used to execute.

1. **Front Kick:** It starts from a high stance with knees slightly bent. The contestant jumps high into the air. Depending upon the range, they rise vertically upwards or diagonally towards his/her opponent. The more vertically one jumps, the higher the kick. This type of kick also involves kicking with the ball of the foot to the opponent's upper chest or face. Keeping one's elbows towards one's side is also beneficial.
2. **Double front kick:** This kick is somewhere the same as a front kick except that the feet strike the target one after the other. This kick starts in the same way as the front kick. The contestant first raises his left leg up and kicks with his left foot suddenly. After that, rising upwards, he kicks with his right foot all of a sudden. The contestant keeps his arms to his sides.
3. **Sidekick:** Jumping side kick begins in the same way as in the front kick, except that, both knees are pulled to the chest. The contestant twists around as he raises so that one hip may turn towards the opponent. He thrusts out the kicking foot as he turns, which drags his body fully sideways on. Then, he pulls his foot into a sidekick position. After that, he picks the kicking leg up, gathers the spent kick back in and lands on the balls of his feet.
4. **Back kick:** This kick is generally performed from a vertical spring or from a jump away from the opponent. First, the contestant jumps and starts turning his body away from the target. He thrusts out a back kick without letting his body turn completely.

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Class 10

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Class 10
Unit 1

Physical Development

Aerobics

Objective

- To promote physical development through aerobics and pyramid building.

Heel Touch

1. Lift the right leg forward, bend the left knee slightly and tap the right heel in front.
2. Place the right leg back to the starting position.
3. Lift the left leg forward, bend the right knee slightly and tap the left heel in front.
4. Place the left leg back in the starting position.

Step Touch Alternately

1. Take one step to the right with the right leg.
2. Place the left leg next to the right leg, touching the right heel with the left toe.
3. Take one step to the left with the left leg.
4. Place the right leg next to the left leg, touching the left heel with the right toe.

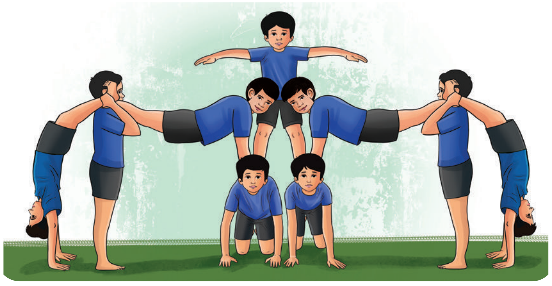
Pyramid

Nine Men Pyramid

Pyramid - 1

1. Two students stand facing each other, left leg lunged forward, holding hands.
2. One student stands over the centre pair, placing one leg on each student's shoulder and hands raised to shoulder level (as shown in the figure).
3. Two pairs of students stand behind the centre pair. From this two pairs, one pair stands just behind the centre pair and the other pair stands two feet away from the pair who stands near the centre pair.
4. One student from another pair balances in air at a slanted angle between the pairs who are standing behind the centre pair with their hands on the shoulder of the student in front and their legs resting on the shoulder of the student at the back as shown in the figure. The student at the back holds the legs.

Pyramid - 2



1. Two students kneel down side by side, keeping their hands on the ground, with their bodies parallel to the ground. Two students stand two feet apart.
2. One student from each side keeps the hands on the backs of the kneeling students and the legs on the shoulders of the standing students.
3. Another set of students, one from each side, performs a handstand, supported by the standing students.
4. One student climbs up on the student in a kneeling position, placing one leg on each student and hands raised at shoulder level (as shown in the figure).

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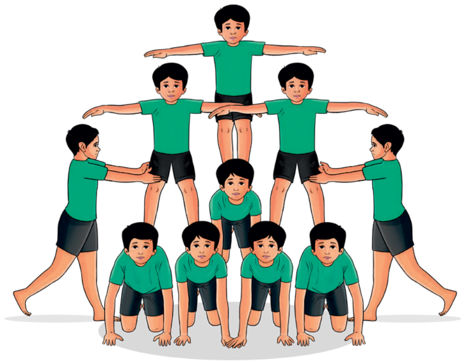
Man made Pyramid

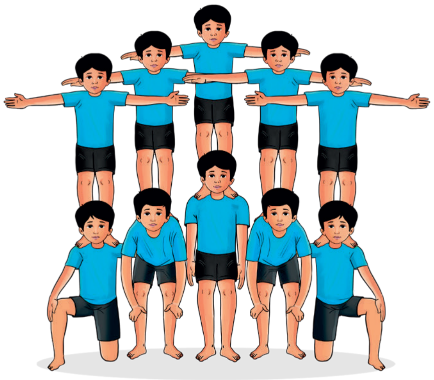
Ten Men Pyramid

Pyramid - 1



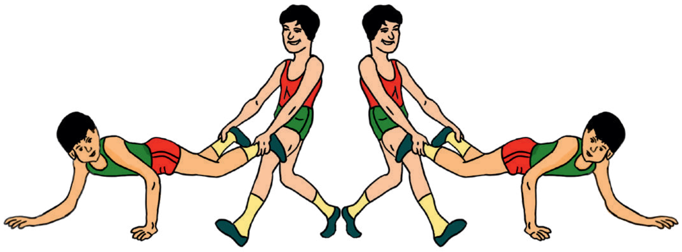
- Four students kneel down side by side, keeping their hands on the ground with their bodies parallel to the ground.
- One student stands behind the centre of the kneeling students and keeps one hand on each two students in the centre.
- Two students, stands on the back of two kneeling students, one on each pair and raised their hands at shoulder level.
- One student climbs over the student who is keeping his hands over the kneeling students at the centre and raises their hands to shoulder level.
- Two students, one on each side of the kneeling students, stand and catch hold of the thighs of the students standing over the kneeling students.

Pyramid - 2



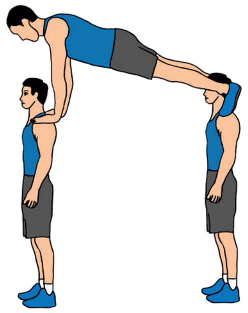
- Five students stand side by side and face forward. The centre student stands tall, while the next adjacent student on both sides slightly bends their knees. The two students at the extreme ends kneel down, with one placing their left knee and the other placing their right knee on the ground (as shown in the figure).
- Another five students, one each, climb up and stand on the shoulders of the students standing on the ground. These students stretch their hands.

Moving Pyramid - 1



- Two pairs of students stand side by side.
- One student in each pair stands with their hands on the floor, lifting both feet and straightening their arms in front of the two standing students.
- The standing students support the feet of the student in front of them with their hands.
- Students who are seated on their hands walk two steps forward with their hands and keep their hands parallel on the third step. The standing students lean forward in line with the walking students. Then, everyone reverses to the starting position.

Moving Pyramid - 2



- Three students kneel three feet away from each other facing the same direction.
- The student in the centre balances between the other two students at the extremes, by placing his feet on the shoulder of the students at one extreme and arms on the shoulder of the student at the other extreme.

- The kneeling students must stand up slowly.
- Remaining in the same position, students slowly move clockwise, resembling the hands of a clock, until they return to the starting position.

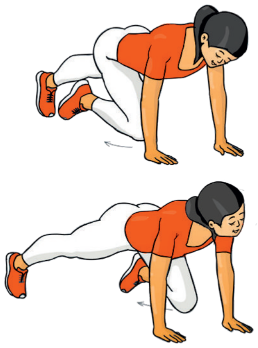
Conditioning Exercises

Objective

- To enhance physical fitness, flexibility and mental relaxation through conditioning exercises.

Leg Thrust

1. Sit in a squatted position.
2. Keep the palms resting on the floor.
3. Extend the legs backward, letting the body weight rest on the toes and the palms.
4. Maintain the equilibrium of the body.
5. Fold the right leg and bring it forward, placing it between the palms and lifting the head upward.
6. While retracting the right leg, bring the left leg forward between the palms.
7. Repeat this movement continuously in an alternating manner for six times.

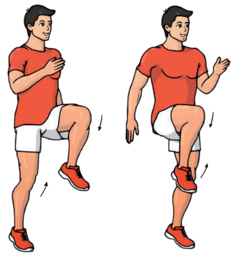


On-the-Spot Running

1. Stand erect in a comfortable position.
2. Run on the spot without moving forward.
3. Raise the knees up and swing the arms alternately.
4. Perform this exercise for 30 seconds.

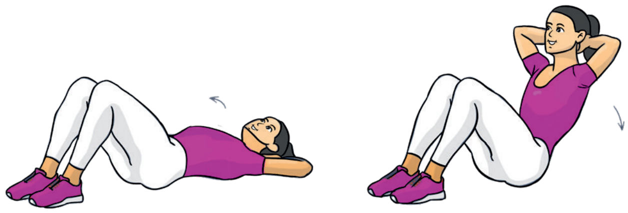
High Knee Action

1. Stand comfortably with feet apart, maintaining balance.
2. Alternately raise the right and left knee to the hip level.
3. While raising the knee, alternately swing the arms.
4. Perform the high knee action for 30 seconds.



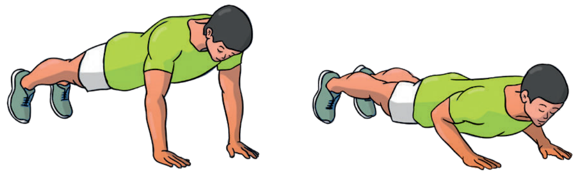
Sit-Ups

1. The student lies in a supine position with hands behind the neck and legs bent at right angles.
2. Curl up the upper body and touch the knees with the elbows.
3. Return to the original position.
4. Repeat this movement 5 to 6 times.
5. Optionally, perform this exercise with a partner.



Push ups

1. The student assumes a prone position parallel to the ground, balancing the body by placing the palms and feet on the ground.
2. Keep the elbows straight.



3. Bend the elbows to lower the body close to the ground.
4. Return to the starting position.
5. Repeat this exercise ten times.

Class 10
Unit 2

Sports Education

Football

Objective

- To develop dribbling skill with control, speed and agility in football.

Teaching the Skill

Dribbling

Dribbling is an important skill in football. Skilled dribblers can navigate through tight spaces, twist away from defenders and maintain possession even when closely marked. It helps the player to keep possession of the ball while moving. It is important to dribble fast and to have the ball in control.

Teaching dribbling skill of football.

- Use short steps.
- Push the ball forward gently with the inside or the outside of the foot alternately.
- Keep the ball close and in front.
- Use peripheral vision (that is, the corner of the eye) to look at the ball while watching the direction being travelled, as skill increases look less at the ball.
- Use the outside of the football or instep (laces) to push the ball 2 to 3 m. Accelerate quickly after it.
- Keep the head up so that one can see the player around. Check the position of the ball by glancing down.
- Use long strides, pump the arms and pick up the knees to increase speed.

Practising the Skill

Practising Tips

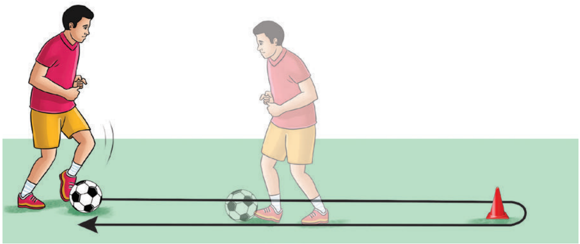
Leg movement: Each player use their legs (Inside and outside the feet) shield the ball from defenders.

Body Positioning: Teach players to use their body to shield the ball from defenders, maintaining possession even under pressure.

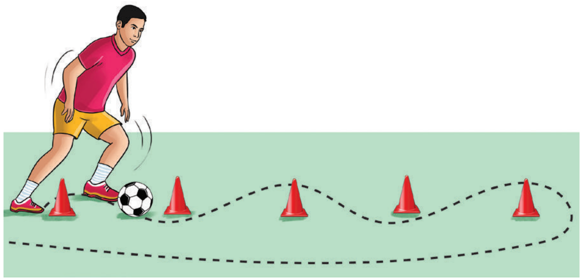
Ball Control: Encourage players to keep the ball close to their feet, allowing for better control and quick changes in direction.

Vision: Players should learn to keep their eyes up and scan the field while dribbling, at the same time assessing the position of the opponent players.

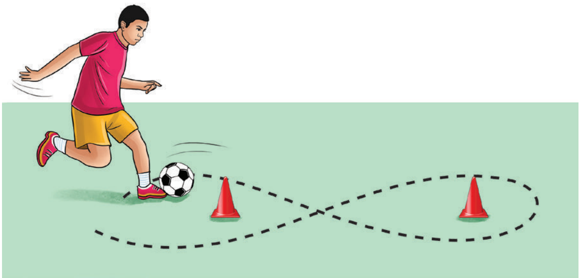
Activity 1
Straight Line Dribbling
Set up two cones 20 metres apart. Dribble straight towards the second cone, then turn and dribble back.



Activity 2
Slalom Dribbling
Dribble through the cones, focusing on balance and coordination.



Activity 3
Figure 8 Drill
Arrange two cones and draw a figure 8 shape. Dribble through the cones, practising quickly to change the direction in figure 8 shape.



Lead up Activity
Dribble Relay
Students are grouped into two teams. They are asked to stand behind the starting line. The turning line is marked 20 metres from the starting line. Each team is provided with a ball. The student who is standing in front has the ball. When the leader blow the whistle, students standing in front of both teams have to dribble the ball to the turning line and come back to their teams to pass the ball to the second student. Likewise both teams have to dribble. The team that finishes first is the winner.

Badminton

Objective
- To teach the correct grip, body position, footwork and arm movement for performing an effective smash and drop shot in badminton.

The drop shot and smash in badminton are important for an all-rounded play , allowing player to keep their opponents off balance and under pressure. Mastery of these techniques can significantly enhance a player's game and increase their chances of winning rallies.

Drop Shot
The drop shot is a stroke that drops shuttle directly behind the net. This shot is played from deep in the court to force the opponent to come to the net.

Forehand drop shot
- The player should stand with a forehand grip on the racquet and the body weight should be distributed evenly on both feet.
- The player should contact the shuttle at the highest possible point and in front of the body.
- While performing, the player should reduce the backswing speed just before the shuttlecock is to be hit.
- The player drops the shuttle exactly across the net as low as possible so that the opponent is forced to hit it from below.
- Swing the racquet head pointing downward for proper follow through.

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Smash

The smash is the most powerful stroke in badminton. The aim of the shot is mostly to score a direct point. An attacking game with many smashes requires excellent physical conditioning. The smash can be performed overhead.

Overhead Smash

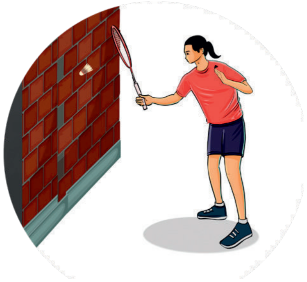
- The player lunges backward with a sideways movement, the body moves backward and the bodyweight lies over the right foot, which stays at the back.
- The right knee is bent and straightened again as the shot is played.
- The player jumps up high and the right elbow is pulled back, the left hand points up at the shuttlecock for balance and aim.
- The right hip and right shoulder are turned explosively forward while hitting and the right forearm turns inward and the wrist is flexed.
- The shuttle is hit at its highest point in front of the body.
- The shuttle lands as near to the front of the opponent's court as possible.
- After smashing, the player lands on the ground with the left foot.

Practising the Skill

Drill 1

Wall Rally Drill

Commonly known as wall practice, a wall rally drill helps to improve shots significantly. So, take an old shuttle and practise against the wall hitting it forward, backward, straight and diagonal.



Drill 2

Drop and Lift Drill

This drill can be done both in half court and full court. However, beginners start with half-court and it can be done as a static or a moving drill. Two students have to practise alternate drop and lift. Student 1 will stand at the back end of the court and student 2 will stand in the middle of the opposite side. Student 2 will play a high serve, student 1 will hit a drop to that serve, student 2 will dribble (remember not to dribble very close to the net to sustain a long rally). Student 1 will then play a high lift, student 2 will execute a drop and so on.

Lead up Activity

Organise the students into two groups. Select students from each group to play doubles and conduct three matches of 10 points each. Whichever team wins more matches will be declared the winner.

Volleyball

Objective

- To know the proper stance, grip and arm movement required for an effective overhand serve in the game of volleyball.

Teaching the Skill

Overhand Serving

Overhand serving is much more commonly used after the beginner stage of volleyball. It can be used to create a "floater" or a topspin serve. The floater is designed to allow conditions in the playground, as humidity and temperature change the path the serve travels.

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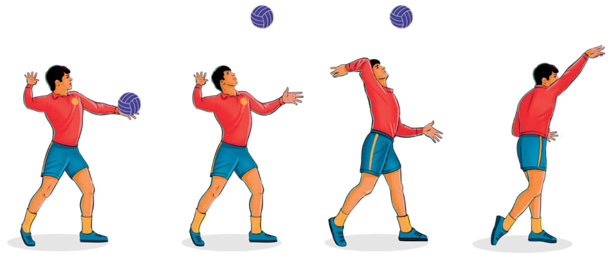
A serve with a topspin travels much more directly to a spot on the opposition's side of the court. The server should start by facing the area of the court the student is aiming at. The ball is held in the non-serving hand, in front of the body.

The serving arm should have the elbow raised above and behind the shoulder and the hand up and behind the head. The bodyweight should be on the same side as the serving hand.



The server then tosses the ball in front of the serving shoulder about 1/2 metre or 1 metre high. (The toss should be high enough for the server to contact the ball above the head and in front of the body.)

Next, the server steps with the foot opposite of the serving hand and then contacts the ball with a firm hand. All parts of the server's body should move towards the target. The follow-through and finish should be directly at the target.

Practising the Skill

Floater

The contact with the ball should be made 2/3 through the serving arm swing. The movement of the hand stops quickly after contact with the ball.

Topspin

A topspin serve would require a wrist snap at the contact point, to create a forward spin on the ball.

Key points for server

Elbow Raised : The serving arm's elbow should be raised above and behind the shoulder.

Hand Behind the Head : The serving hand is behind the head.

Toss the ball : Toss the ball in front of the serving shoulder, high enough for the ball to be contacted above head height.

Drill 1

Throwing:

The servers should practise in front of the shoulder of the striking hand above the head, toss the ball high enough to contact the ball.

Drill 2

Partner Serving:

Have each of the servers stand on the 10- metre line. Have them serve the other player. As they succeed, have them step back in one-step, until they are at the back line.

Lead up Activity

Overhand Serve Relay

Group the players into two or more teams. Each team lines up behind the service line. Place targets (like hoops or marked areas) on the opposite side of the court. Players take turns serving overhand, aiming for the targets. Each player is given three chances. Each successful serve that lands in the target earns a point for the team. After serving, the player runs to the end of their team's line. The game continues until each player has served three times and then the second team begins the game. The team with the most points at the end wins.

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400 M Hurdle Clearance

Objective

- To develop the clearance technique of 400m hurdles by focusing on maintaining rhythm and proper lead leg coordination.

Teaching the Skill

Embark on the path to perfecting the 400m hurdles clearance technique by refining the approach. In this pursuit, we'll explore the nuances of rhythm maintenance and precise lead leg coordination, critical for hurdling with speed and finesse.

Hurdling Technique:

Leg Motion: Pass over hurdles with a quick motion of the legs, not by leaping.

Take off: Use one leg to take off and the other leg leads over the hurdle.

Lead Leg:

Typically, the left leg is the lead leg.

Right Leg Take off: More advantageous for taking off, especially on an anticlockwise track, because the body leans left on curves.

Step Management:

Odd Number of Steps

- Ensures the left leg leads.
- Top athletes use 13 steps between hurdles.

Even Number of Steps

- When the right leg is the lead leg, 14 steps are needed between the hurdles.
- By practising two or four times between the hurdles, the left leg becomes the lead again.

Adjusting Steps

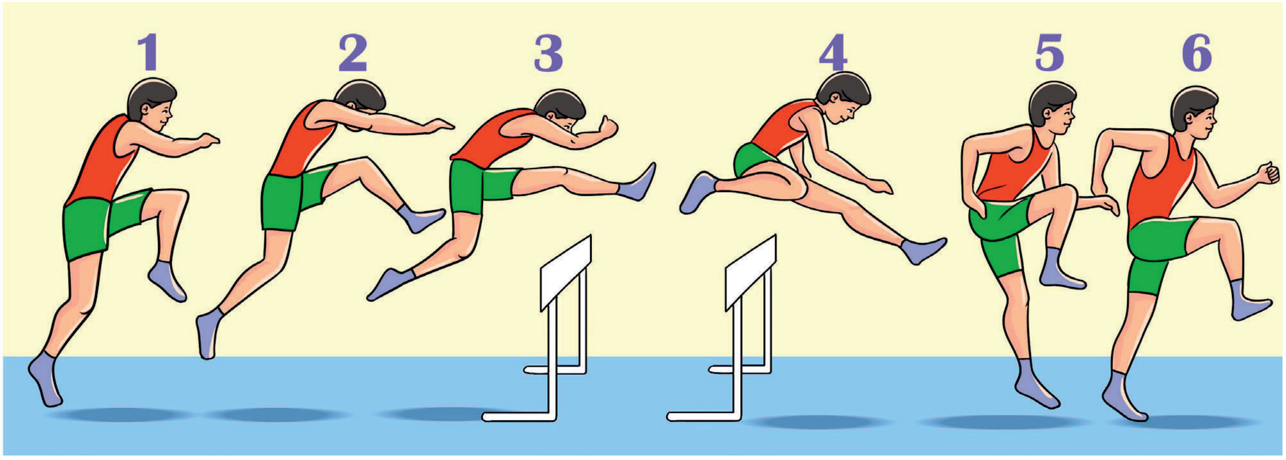
As athletes get tired, they switch from 13 to 14 steps and finally to 15 steps near the end of the race.

Control Steps

Adjusting the number of steps between the hurdles is the key to maintaining speed and reducing time.

Watch the Lead Leg

Observe changes in the lead leg for pacing and strategy insights during the race.



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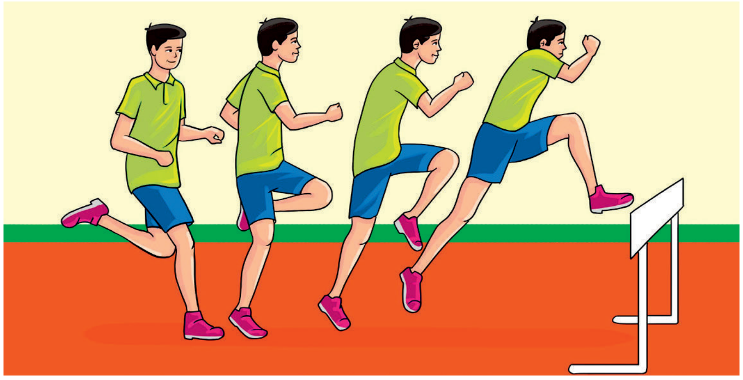
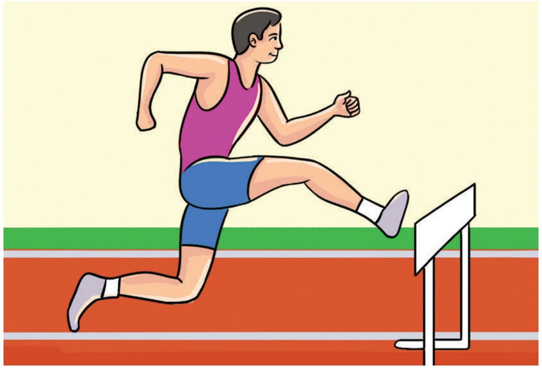
Practising the Skill

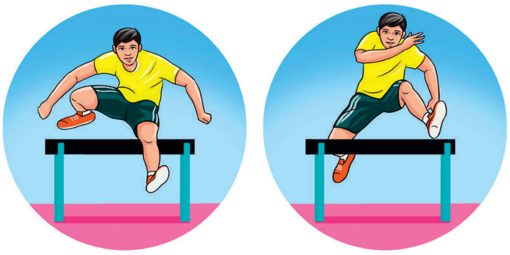
Rhythmic Run





- Use sticks to mark 0.5-1m spaces 6-7 m apart.
- Use a short approach with either leg to take off.
- Run over the sticks with 3 strides which are placed in between the hurdles.
- Do not jump (while running).
- Increase the speed between the sticks and run.

Run alongside the Hurdle



- Use hurdles of moderate height 7–8 m apart.
- Run alongside hurdles in a 3-stride rhythm.
- Clear the hurdle with either lead or trail leg

Lead Up Activity

Group the students into two equal groups: Group A and Group B. Draw two concentric circles with radii of 15 metres and 16.22 metres. Place 5 hurdles evenly spaced along the circumference of each circle. On command, the first student from each group starts running and clears all the hurdles in the circle. After clearing the last hurdle, the student returns to the starting point and tags the next student in their group. The game continues until all the students in the group finish. The group that completes the drill first is declared the winner.

Relay (Non Visual Baton Exchange)

Objective

- To make the students learn the proper method of non-visual baton exchange (push pass) technique in 4 x 100 m. Relay.

Teaching the Skill

There are three types of non-visual exchanges:

1. Up Sweep **2. Down Sweep** **3. Push Pass**

Push Pass Technique

- Outgoing runner's arm is extended backward with the palm of the hand and the thumb pointing downwards.
- Incoming runner should push the baton horizontally forward and place the baton across the palm of the outgoing runner's hand.

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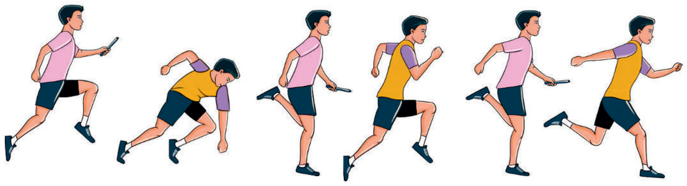
- Distance between the runners should be atleast 1 m, which develops confidence in their exchange mark and the push pass.
- Accept outgoing athletes' responsibility to provide a stable 'target' while exchanging (for receiving) the baton.
- Push the baton forward as the incoming runner is in a natural sprinting action.

Practising the Skill

Out-Going Runner Action

While the teacher whistles, the athletes do arm action in a stationary position, extending their right hand backward.

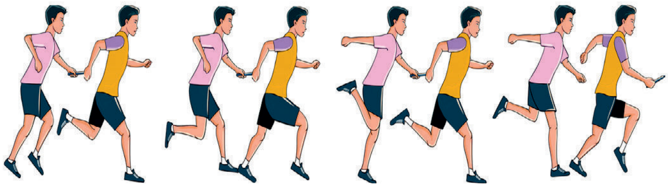
Incoming Runners' Action



On hearing the whistle sound, the athletes do arm action with the relay baton in a stationary position extending their hand forward with the baton.

On the spot baton exchange

Group the students in fours. All should practise arm action and say go. First athlete holds the baton in the right hand and the second runner extends the left hand backward and receives the baton and continues the action. Next, the second runner gives the baton to the third runner's right hand. The third runner hands over the baton to the left hand of the fourth runner.



- Baton exchange with walking.
- Baton exchange with jogging.
- Baton exchange with running.
- Fix the check mark and practise running and baton exchange.
- Through a trial-and-error method, confirm the checkmark.

Lead-up Activity

Create a track, either by drawing it or forming a circular track with a minimum radius of 10 metres. This will be the racecourse. Organise students into four groups. Each group becomes a team for the relay race. Ensure equal team sizes for fairness and teamwork. Organise the relay race according to the track layout. Teams take turns running around the track, passing the baton or object to the next runner. The race continues until all the team members complete their laps. Evaluate teams based on time taken, teamwork and adherence to the rules of the race. Award the winning team to foster sportsmanship and participation.

Triple Jump

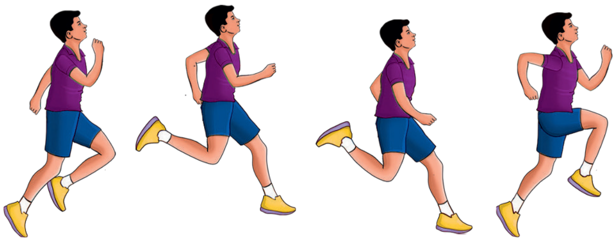
Objective

- To teach and train the students the triple jump technique, focusing on proper execution of the hop, step and jump phases to achieve the maximum distance.

Teaching the Skill

The triple jump is a challenging track and field event that requires technique and coordination. In order to excel in triple jump, students have to master the three phases namely, the hop, step and jump. Students must focus on the techniques used in each phase to maintain balance, power and control.

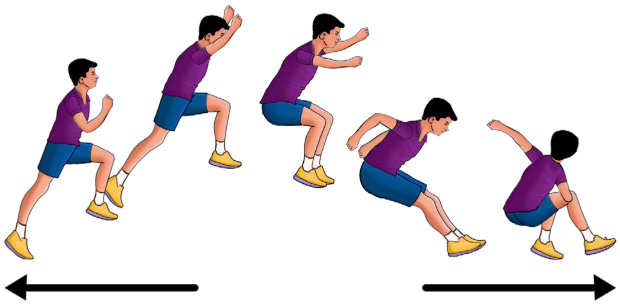
The Run-up



- The triple jump approach should start from a standing position.
- Before the take-off (hop), the last four strides should be accelerated quickly and accurately.

The Hop

- The same dominant foot must be used to take-off and land.



- The athlete gathers pace for the hop in the final two strides and takes-off, driving the free knee vigorously upwards along with the opposite arm.
- The take-off leg is extended dynamically. The athlete should sense flat footed contact with the take-off board, although in actual fact it will be slightly heel first.
- During the flight, the take-off knee is picked up and brought to the front of the body so that the thigh is parallel to the ground.
- The athlete is then in a position to reach and strike to engage the 'active' landing and take-off for the second phase.

The Step

- The athlete takes a long step forward with the other foot while keeping the first foot in contact with the ground.
- The athlete must use a rotational action of one arm or both arms.
- The other leg must be swung to bring the thigh parallel to the ground.
- The sprint is fully completed when the athlete approaches a split position in the air.

The Jump and Landing

- Momentum at this stage is dropping rapidly, but the athlete strives to maintain it. A double arm shift should be used, as in all jumps, the free knee should be driven hard and the take-off leg extended explosively.

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- The aim of the flight is to adopt a position in the air that will allow for an effective landing with legs fully extended in front and with the arms high above the head so that they can be swung downward and backwards.
- This action lifts the feet prior to landing. The take-off angle should be higher than for the hop and step.
- The foot plant is active and quick with a 'down and back' motion. Support leg is almost straight during takeoff. Double arm action is used if possible. The body position is upright.
- Hang or sail technique is used in the air. The legs are almost fully extended at landing.

Practising the Skill

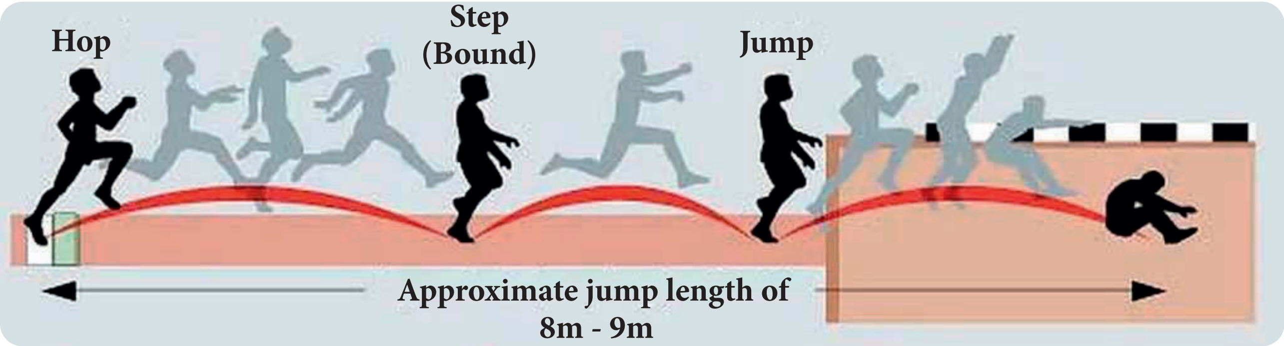
Standing Triple Jump

Place 3 cones down on the ground approximately 1 to 1.5 metres apart in front of the pit. Practise the correct sequence of the Triple Jump – Hop-Step-Jump. Ask the athlete to stand on their strongest foot to begin the take off. Then follow the sequence:

- **Hop:** take off and land on the same foot
- **Step:** take off and land on the opposite foot
- **Jump:** take off and land in the pit with the feet together. Repeat three to four times.

3 - 4 Stride Triple Jump

- Move the students approximately 5 metres from the take-off point and ensure that they are still close enough to the pit to make the jump easily and land in the pit. Then get the athlete to 3-4 strides and complete the triple jump motion, remembering what they had practised from standing – hop-step-jump. Repeat three times to create three equal phases.



8-10 Stride Triple Jump

- During the 3-4 stride triple jump, identify those who are able to complete the exercise with ease. Make the student stand 10 feet apart from the take off point.
- Encourage these athletes to measure their ten stride run-up by walking back 22 normal steps.
- Ensure they start their run-up from this point (22 normal steps).
- Keep the other athletes on the other line closer to the pit and practise 3-4 stride triple jump.
- By keeping all the three phases of the jump at an equal distance and make all the students practice it.

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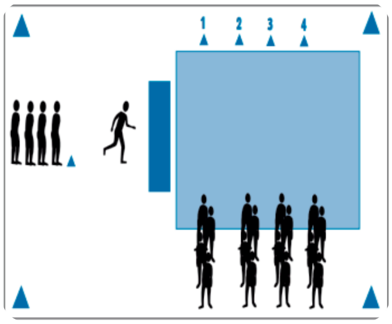
Lead Up Activity



Organise the students into three or four groups of equal numbers. Make the students stand in line. Place cones of three different colours in the jump pit at equal intervals from the takeoff board. Conduct the triple jump competition, giving each student three attempts, as they were trained using the three and four step methods. In this triple jump competition, students earn one point for reaching the first colour cone, two points for reaching the second colour cone and three points for reaching the third colour cone. Each student's total score is the sum of points earned in their three attempts. At the end of the game, the team with the highest total points wins.

Shot Put

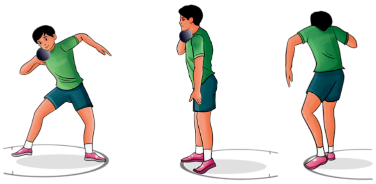
Objective

- To teach and train the students the rotational technique of shot put.

Teaching the Skill

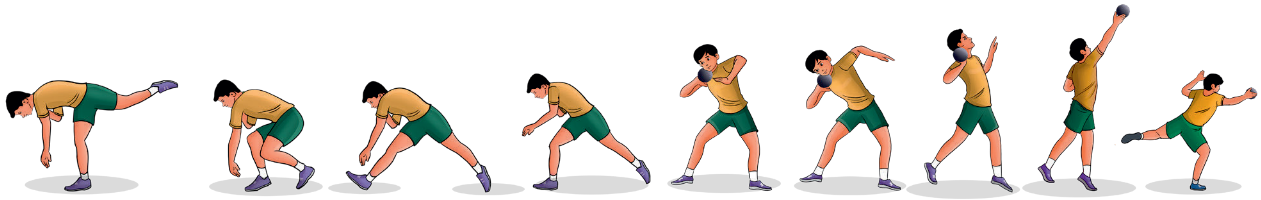
The rotational technique in shot put involves a dynamic movement where the thrower spins around their longitudinal axis to generate power and momentum for the throw. This technique allows for a longer throw pathway and higher angular velocity of the shoulder in the final phase of acceleration, potentially leading to increased performance in shot put competitions.

Phase Description

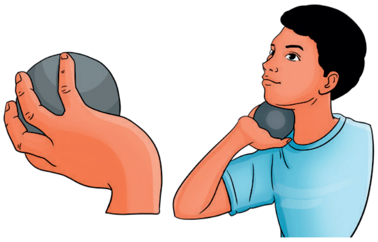


The Rotational Shot put Technique is divided into four phases:

- Preparation
- Momentum building
- Delivery
- Recovery
- In the preparation phase, the thrower moves to the optimum position to begin the turn.
- In the momentum building phase, the shot is accelerated as the thrower moves to the optimum position for delivery.
- In the delivery phase, additional velocity is produced and transferred to the shot before it is released. In the recovery phase, the thrower avoids fouling.



Preparation

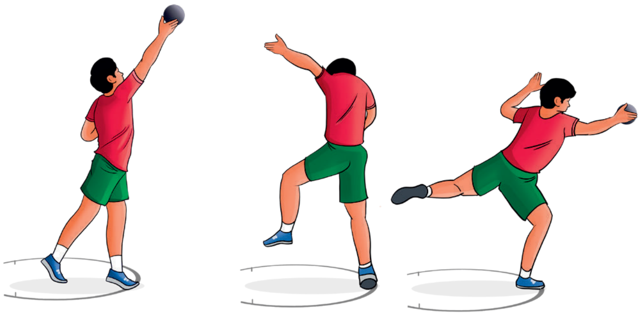


- Shot is placed further back on the neck than in the Linear Technique.
- The upper body is bent slightly forward with the back to the stopboard.
- The legs are spread a little more than shoulder-width.
- Weight is on the balls of the feet.
- The upper body twists against the direction of the turn.
- Turn starts when the right shoulder points in the direction of the throw.
- Turn starts to the left.

Turn to Centre of the Circle

- The body weight is transferred on to the ball of the left foot, knees are bent.
- The left foot, left knee and straight left arm turn to the left simultaneously.
- The right leg swings wide.
- The shoulders remains at equal level.
- Initial movement is slow and controlled in the direction of the throw.
- The left knee and toe must have turned completely to the front.
- The driving leg is not completely extended.
- The Landing is on the ball of the right foot at the centre of the circle.
- The trunk is bent for landing, the left arm folds across the chest.

Delivery Stance / Power Position



- Spread the feet more than the shoulder width. Turn left foot to the left side.
- The right leg swings over the outside from the centre of the circle.
- The right foot lands on the ball of the foot in the centre of the circle, the left foot lands quickly after the right foot.
- The power position is shorter than in the linear technique (‘Heel-Toe’ position).
- The left knee moves close to the right knee and forwards.
- The body is kept closed. (left arm is in front of the trunk, head faces the rear of the circle)
- The delivery phase begins when both feet land on the ground.

Release and Follow Through

- The body weight is placed mostly on the ball of the right foot, the right knee is bent.
- The ball of the right foot and the heel of left foot are placed on a line: ‘Heel-Toe’ position.
- The hip and shoulder is twisted.
- Keep the head and shoulder back.
- The right elbow is at a 90° angle to the trunk.
- The right leg is extended and twisted explosively until the right hip faces the front of the circle.
- The left leg is fixed, then lifts, creating a ‘jump’ delivery (influencing the angle of release).
- Trunk’s twisting movement is blocked by the left arm and shoulder.
- The right elbow is turned and raised in the direction of the throw.

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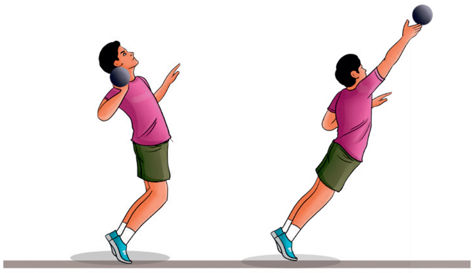
- Strike of the putting arm begins after full extension of the legs and trunk. The left arm is bent and fixed close to the trunk.
- Acceleration is continued by pre-stretched wrist (fingers turning out after the release).
- Release is made immediately after loss of ground contact.
- Legs change quickly after release.
- The right leg is bent and upper body is lowered. The left leg swings backward and eyes look down.

Practising the Skill

Forward Puts



- Stand with feet shoulder-width apart.
- Bend the knees and throw the shot.
- When putting the shot, keep the balls of the feet on the ground.
- Maintain contact with the ground.

Turn Exercises

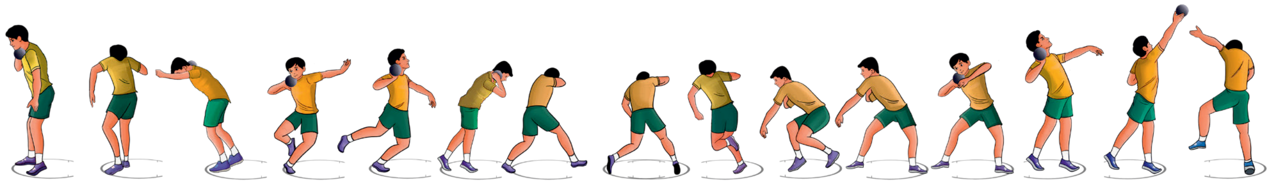
- Turn continuously along a straight line.
- Control the power position after each turn.
- Remain on the balls of the feet.
- With and without shot, practise turn exercises.
- Exercise with other equipment.

One-Turn Throw

- Start with the left shoulder pointing in the direction of the throw, the left foot inside and right foot outside the circle.
- Turn on ball of the left foot, swing the right leg outside, then to the centre of the circle

Whole Sequence

- Perform without and with the shot, controlling and correcting the power position.
- Perform on different surfaces, with eyes closed, different implements (e.g. medicine balls) and different shot weights.



Lead-up Activity

Organise the students into equal groups. Students line up near the designated shot put area. Each student takes turns putting the shot in the marked area. Measure the distance of each shot that is put and identify the student who achieved the maximum distance. Assign points based on the distance achieved: First marker = 1 point; Second marker = 2 points; And so on, with each subsequent marker earning more points. At the end of the activity, congratulate the individual and team winners for their achievements.

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Class 10
Unit 3

Asanas and Breathing Techniques

Asanas

Objective

- To enhance physical development, flexibility and mental relaxation through Asanas and Breathing techniques.

Virkshasana

Posture : Tree-like body angle
Position : Standing position

Procedure:

1. The body should be straight.
2. Keep the left leg firmly on the floor.
3. Lift the right leg and place it above the knee, so that the foot rests on the inner thigh.
4. Both hands should be raised and palms should be placed together.

Benefits:

1. Mind is balanced.

Ustrasana

Posture : Camel Pose
Position : Sitting position

Procedure:

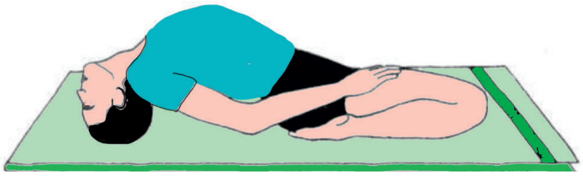
1. Sit in Vajrasana posture.
2. Stand on knees and keep body straight.
3. Bend the body backwards and bring the hands back one after the other and place them on the soles of the feet. Stay in the same position for 20 seconds.
4. Relax the body and slowly return to position 1.

Benefits:

1. Increases the flexibility of the spine.
2. Back pain, respiratory disorders are relieved.
3. Helps to regulate thyroid problems.

Subtavajrasana

Posture : An oblique thunderbolt Pose
Position : Sitting position



Procedure:

1. Sit in Vajrasana posture.
2. Bend the torso back slowly from the hips.
3. Using the hands, bend the head until it rests on the floor and only the top of the spine should touch the floor. Close the eyes and breathe slowly and steadily.
4. Then return to position 1.

Benefits:

1. Helps to strengthen the head area.
2. Promotes good blood circulation.
3. Relieves back pain.

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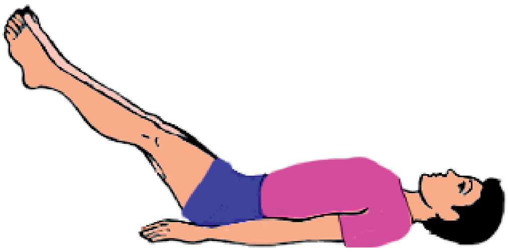
Utthanapadasana

Posture : Raised Legs pose
Position : Supine lying position



Procedure:

Step 1 : Lie in supine position with hands near the thighs and palms facing the floor.

Step 2 : Press the hands down and slowly raise both legs upwards to 45°. In this position, hold it for 20-30 seconds. (Do not fold the legs).

Step 3 : Back to step-1.

Benefits:

- Good for all ailments related to women.
- Good for the abdominal area.
- Abdominal muscles get stronger.
- Increases digestive power.

Breathing Techniques

Floating - Breathing Exercise

1. Find a comfortable sitting position with the back straight and the hands resting on the knees.
2. Take a few deep breaths in and out through the nose, focusing on relaxing the body and calming the mind.
3. Inhale deeply through the nose and swallow the air, allowing it to fill the stomach. Practise this a few times to get the hang of it.
4. Hold the breath for as long as it is comfortable. Start with a few seconds and when it becomes more comfortable with the practice, gradually increase the duration
5. Slowly release the breath through the nose, allowing the air to escape from the stomach.
6. Take a few normal breaths in and out through the nose and then repeat the process as many times as possible.

Alternate Nostril Breathing

1. Close the right nostril using the right thumb and inhale very slowly through the left nostril. Then exhale very slowly through the left nostril. Repeat this process ten times. (When inhaling, allow the stomach to expand. When exhaling, let the stomach contract slowly).
2. Next, close the left nostril with the right ring finger. Inhale slowly through the right nostril and exhale very slowly through the right nostril. Repeat this exercise ten times.
3. Now, close the right nostril with the right thumb and inhale slowly through the left nostril. Then, close the left nostril with the right ring finger and exhale slowly through the right nostril. Repeat this sequence ten times.
4. Finally, close the left nostril with the right ring finger and slowly inhale through the right nostril. Close the right nostril with the right thumb and exhale slowly through the left nostril. Repeat this process ten times.

Class 10
Unit 4

Exercise Nutrition and Drug Abuse

Exercise Nutrition, Doping Policies and Practices

Objectives

- Make the students understand the importance and effectiveness of sport specific diet (Veg., Non-Veg.) which enhances performance.
- To determine the efficacy of vegetarian and non-vegetarian foods and to take them appropriately for better performance.
- To understand the intake of vegetarian / non-vegetarian foods enhance the performance at the highest level.
- To know the importance and benefits of millets which provide adequate nutrients and sustained energy for performing well in sports.
- To know about the ill-effects of doping.

Balanced diet

A balanced diet is one which provides all the nutrients in required amounts and proper proportions.

Sports Nutrition

Sports nutrition plays an important role in maximizing an athlete's potential by ensuring proper nourishment and energy availability. It is designed to systematically provide the nutrients and energy needed to improve the athelete's performance.

Importance and benefit of sports nutrition

Enhanced Performance: Proper nutrition provides the necessary energy for optimal athletic performance. It fuels workouts, helps maintain stamina and supports muscle function during exercise.

Reduced Risk of Injury: Adequate nutrition supports physiological adaptations, which can reduce the risk of injuries. Well-nourished muscles and bones are less prone to strains, fractures and other sports-related injuries.

Improved Recovery: After intense physical activity, the body needs nutrients to repair and recover. Proper nutrition helps replenish glycogen stores, repair muscle tissue and reduce inflammation.

Delaying Fatigue: Nutrient-rich foods provide sustained energy, allowing athletes to train longer and delay the onset of fatigue during workouts or competitions.

Immune System Support: A well-balanced diet supports a healthy immune system. Athletes who are well-nourished are less susceptible to illnesses and infections.

Body Composition: Nutrition influences body composition, including muscle mass and fat percentage. Proper nutrition helps to maintain an ideal body composition for optimal performance.

Focus and Concentration: Nutrients play an important role in cognitive function. A well-fed brain enhances focus, concentration and decision-making during sports activities.

Plant based foods

Plants provide food that are rich in essential nutrients which humans require.

They come in a wide range of colours, flavours - textures and are an important source of vitamins, minerals and fibre in the human diet. Examples of common vegetables include broccoli, carrots, onions, potatoes, tomatoes and greens.

Benefits of vegetarian foods in Sports Nutrition

Optimal Nutrition	❖ Vegetarian foods provide all the necessary nutrients for athletic performance, including carbohydrates, proteins, fats, vitamins and minerals.
Enhanced Recovery	❖ Vegetarian foods help reduce oxidative stress and inflammation, aiding in faster recovery after intense workouts.
Cardiovascular Health	❖ Athletes who intake vegetarian foods may experience improved cardiovascular health, which is crucial for endurance and overall performance.
Weight Management	❖ Vegetarian foods are often lower in calories and fat, helping athletes maintain a healthy weight without compromising nutrient intake.
Muscle Efficiency	❖ Adequate protein and micronutrient intake in vegetarian foods helps to maintain muscle strength, power and endurance.

Animal based foods

Non-vegeterian foods play a significant role in sports nutrition, Proteins from animal sources are complete proteins, they provide all the essential amino acids that the body cannot synthesise on its own.

These amino acids are crucial for the repair and growth of muscle tissue, especially after intense training sessions.

Eggs	A complete protein source with essential amino acids.
Chicken and Fish	Lean meats rich in protein and low in fat.
Dairy	Milk, yogurt and cheese provide calcium and protein.
Seafood	Fish like salmon and tuna offer omega-3 fatty acids.

Contribution of Non-vegetarian foods to sports nutrition:

Protein Quality: Proteins in non-vegetarian foods are considered high-quality proteins because they contain all essential amino acids in ratios that align closely with human needs.

Muscle Repair and Growth: Consuming protein in non-vegetarian foods helps in the repair and growth of muscle tissues, which is vital for athletes undergoing rigorous training.

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Energy and Metabolism: Non-vegetarian foods can also provide other nutrients like iron, zinc and B vitamins, which are important for energy production and metabolism.

Weight Management: High-protein diets from non-vegetarian foods help the athelete for weight management.

Whole grains

Whole grains are grains that contain all three key parts of the seed: the bran, germ and endosperm. They are considered more nutritious than refined grains because they provide more fibre, vitamins and minerals. Whole grains are an excellent source of complex carbohydrates, fibre and other nutrients. It is ideal for athletes who need sustained energy for training and competition.

Common whole grains include:

Oats: Rich in fibre and help to lower cholesterol.

Whole Wheat: Good for heart, health and digestive system.

Brown Rice: Contains more fibre and nutrients.

Millets

Millets are nutrient-dense, gluten-free grains that offer health benefits. When it comes to sports participation, incorporating millets into the diet can provide essential nutrients and energy.

Types of Millets

There are several types of millets available, each with its unique flavour and nutritional profile.

Some popular millets include:

Finger Millet (Kezhvaragu)	Foxtail Millet (Thinai)	Barnyard Millet (Kuthiravali)	Sorghum (Cholam)
Kodo Millet (Varagu)	Little Millet (Samai)	Pearl Millet (Kambu)	Proso Millet (Panivaragu)

Benefit of millets to sports nutrition

Rich in Nutrients: Millets are packed with essential vitamins and minerals. They contain iron, magnesium, B vitamins (such as thiamine, riboflavin and pyridoxine) and more. These nutrients play crucial roles in oxygen transport, muscle function and energy metabolism.

Energy Booster: Millets provide sustained energy due to their complex carbohydrates. They help athletes to maintain stamina during workouts and competitions.

Gluten-Free: Millets are naturally gluten-free, making them suitable for individuals with gluten sensitivities or celiac disease.

Drug Testing in Sports - Policies and Procedures

World Anti-Doping Agency (WADA) enforce anti-doping regulations to maintain fair competition and protect the integrity of sports.

Preventing drug abuse in sports among school children requires a multifaceted approach involving education, support systems and strict enforcement of anti-doping policies.

Schools, parents, coaches and sports organisations play crucial roles in educating students about the risks associated with drug abuse, promoting healthy lifestyles and fostering a supportive environment

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that discourages substance misuse. Additionally, implementing regular drug testing protocols and consequences for violating anti-doping policies can deter students from engaging in drug abuse.

Sporting authorities have banned many drugs because they may give an athlete an unfair advantage. They might also cause health issues.

Athletes might be tempted to use 'performance-enhancing drugs' (PEDs) or 'performance and image-enhancing drugs' (PIEDs) because of a desire to win, prizes, large sponsorship deals and social pressures to win.

Athletes who are caught doping may face penalties such as disqualification, suspension, or bans from competition.

The policies and procedures in India for drug testing in sports are primarily governed by the National Anti-Doping Agency (NADA) and the World Anti-Doping Agency (WADA) regulations.

The list which specifies substances and methods prohibited both in-competition and out-of-competition. The list is updated annually and includes substances such as anabolic steroids, stimulants, hormones and masking agents.

Penalty

Athletes who test positive for banned substances face:

- disqualification, suspension and forfeiture of medals or titles.
- penalties depend upon the substance detected, the athlete's history and the circumstances surrounding the violation.

Appeals Process

- Athletes have the right to appeal against doping charges to ensure fairness and transparency.
- It is heard by NADA or WADA depending on the level of competition and the nature of the violation.

Procedures

- Testing procedures involve both urine and blood sample collection from athletes.
- Under strict protocols to ensure integrity and prevent tampering.
- Sports persons are instructed to cooperate with the procedures and with the testing officials for testing.
- Detect the presence of prohibited substances or their metabolites.
- Those involved in trafficking or distribution of prohibited substances may face more severe penalties.

Students should be encouraged to participate in healthy sports without the use of doping.

Class 10 Unit 5

Career Opportunities in Sports

Objective

- Identify various career opportunities in the area given such as career perspectives, funds and so on.

A career involves gaining skills for employment or a profession. In physical education, there are numerous opportunities for a successful career. Globally, players are highly valued and receive significant benefits. The Indian government offering high positions and facilities in both government and semi-government sectors. Additionally, careers in sports offer ample opportunities in the private

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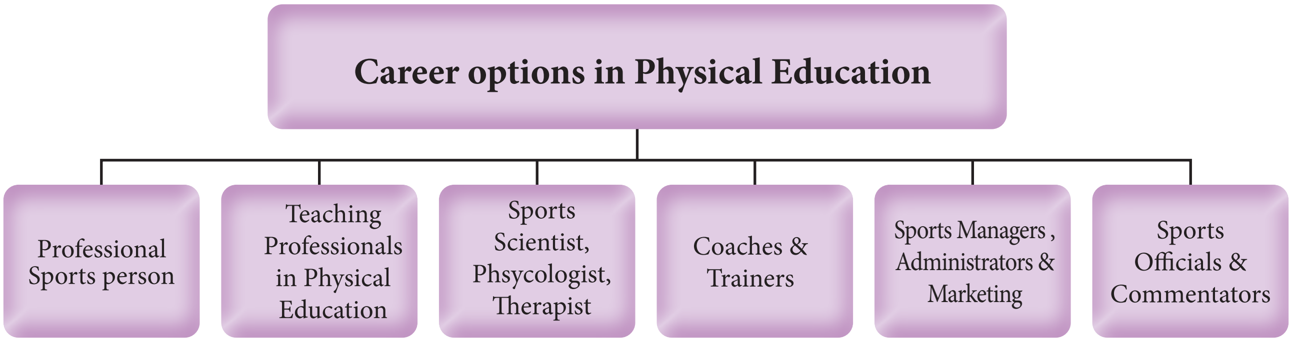
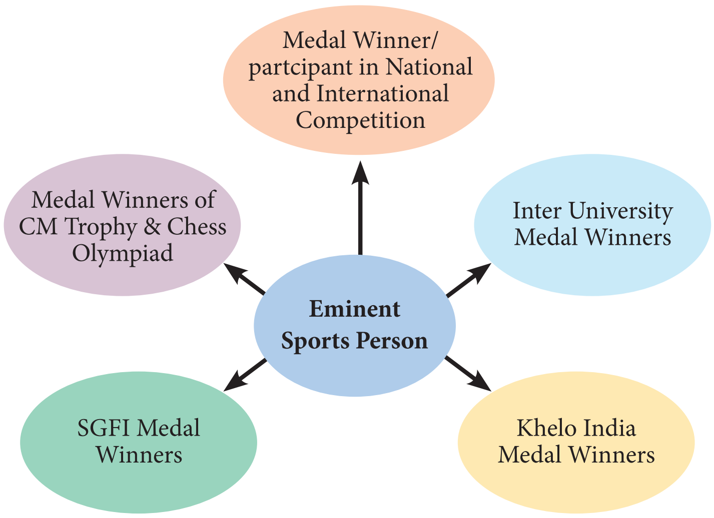
sector as well. Physical education is now mandatory in schools and universities due to its growing importance.

Due to the increasing demand for physical education, every person is choosing the field of physical education for his career. And it is also natural, where the demand is more, where curiosity grows.



Employment opportunities for Eminent Sports Person

Reputed institutions like Indian Airlines, Railways, Nationalised Banks, Central Excise and Customs, Income Tax, Port Trust of India, Integral Coach Factory, Oil and Natural Gas Corporation (ONGC), Post and Telegraph, BSNL, Indian Oil Corporation, Bharat Petroleum Corporation and State Electricity Boards recruit professional sportspersons under the sports quota.



Career Guidence for pursuing Higher Education

The school and college students excelling in sports can gain admission to higher education institutions to pursue professional courses like medical, engineering, arts and science. Tamil Nadu Professional Course Admissions offer a 3% reservation and there are 7 MBBS seats and 1 BDS seat reserved for sports excellence. The Tamil Nadu government has provided guidelines for awarding marks based on various levels of performance during engineering and medical admission counselling.

Table (I) - Marks for Recognised International Achievement

Sl. No.	Competition	Gold	Silver	Bronze	Participation
1.	International (Representing India Category – IA, IB) – Once in 4 years	1000	850	650	400
2.	International (Representing India Category – II) – Once in 2 Years	500	450	400	250
3.	International (Representing India Category – III) – Every Year	400	350	300	200

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Table (II) – Marks for Recognised National Achievement

Sl. No.	Competitions	Allocation of Marks			
		Gold	Silver	Bronze	Participation
1.	National Championships / National Games – Organised by National Federations / IOA	190	160	130	100
2.	School Games Federation of India (SGFI) National Level Competition	190	160	130	100
3.	Khelo India Youth Games - National Level	190	160	130	100

Table (III) – Marks for Recognised State Championship and State Competition

Sl. No.	Competitions	Allocation of Marks			
		Gold	Silver	Bronze	Participation
1.	State championship representing revenue districts-organised by State Sports Associations	95	80	65	45
2.	Bharathiyar day Sports Meet (State Level)	95	80	65	45
3.	Republic days Sports Meet (State Level)	95	80	65	45
4.	KVS/CBSE / CISCE (ICSE) Board National Sports Meet	95	80	65	45
5.	SDAT - State level Chief Minister's Trophy for Sports & Games	95	80	65	45

Table (IV) – Marks for Recognised Regional Level Achievements

Sl. No.	Competitions	Allocation of Marks			
		Gold	Silver	Bronze	Participation
1.	KVS/CBSE / CISCE (ICSE) Board Sports Meet (Regional Level)	**60**	**45**	**30**	**10**

Table (V) – Marks for Recognised District Level Achievements

Sl. No.	Competitions	Allocation of Marks			
		Gold	Silver	Bronze	Participation
1.	District Tournaments/ Sports Meet/ Championships conducted by District sports Associations (Recognised by SDAT/TNOA)	45	30	15	5
2.	District/ Education District Inter School Competition / SAI promotion Games (District Level)	45	30	15	5
3.	SDAT- District level Chief Minister's Trophy for Sports & Games	45	30	15	5

Gold (I Position) **Silver (II Position)** **Bronze (III Position)**

Physical Education Courses

COURSE	D.P.Ed.,	B.Sc.,	B.P.E.,	B.P.Ed.,	M.P.Ed.,	Ph.D.,
Duration	2 Years	3 Years	3 Years	2 Years	2 Years	2-5 years
Scope	Teacher	Teacher	Teacher	Teacher	Teacher/ Lecturer	Lecturers

Allied Physical Education Courses

Course	Scope
NIS Diploma/Regular	Coach & District Sports Officer
SPORTS BIO MECHANICS	Sports Scientist
SPORTS PSYCHOLOGY	Sports Psychologist
SPORTS PHYSIOLOGY	Sports Physiologist
SPORTS MANAGEMENT	Sports Manager and Administrator
SPORTS MEDICINE	Sports Physiotherapist
SPORTS TRAINING	Sports Trainer
YOGA EDUCATION	Yoga Trainer
SPORTS JOURNALISM	Sports Journalist
SPORTS STATISTICS	Sports Statistician

Annexure

Swimming

Swimming is a game an art, which moves the body forward with the coordination of hands and legs together. World Aquatics, formerly known as FINA (Fédération internationale de natation; English: International Swimming Federation), is the international governing body for aquatic sports.

Different Strokes in competitive sports:

1. Freestyle (Front Crawl)
2. Backstroke
3. Breaststroke
4. Butterfly

Freestyle

Freestyle means any style other than backstroke, breaststroke or butterfly. Freestyle swimming implies the use of legs and arms for competitive swimming, The front crawl is most commonly chosen by swimmers, as this provides the greatest speed.

Backstroke

Backstroke (also known as back crawl) is one of the four competitive swimming styles regulated by FINA. It is the only stroke swum on the swimmer's back. Here's a brief explanation:

Body Position: In backstroke, the swimmer lies on their back with their face upward, looking at the sky or ceiling.The body remains flat and streamlined on the water's surface.

Arm Movement: The arms alternate in a continuous motion. As one arm pulls through the water from an overhead position to the hip, the other arm recovers above the water from the hip to the overhead position. This alternating arm movement propels the swimmer forward.

Leg Movement: The legs perform a flutter kick, similar to the one used in the front crawl (freestyle). The kick originates from the hips, with straight legs and pointed toes.

Breathing: Swimmers breathe by rotating their head to the side during the arm recovery phase. Since the swimmer is on their back, breathing is relatively easy compared to other strokes.

Advantages and Challenges:
Advantage: Easy breathing due to the face being out of the water.
Challenge: Swimmers cannot see where they are going, so maintaining a straight line can be tricky.

Breaststroke

Breaststroke is a swimming style in which the swimmer is on their chest and the torso does not rotate.

Body Position: In breaststroke, the swimmer lies on their chest with their face in the water. Unlike other strokes, the torso remains relatively flat and does not rotate.

Arm and Leg Movement: The arms move in a circular motion simultaneously out, then together and back to the starting position. The legs perform a frog-like kick: knees together, feet turned outward and then whipped back.

Breathing: Swimmers breathe by lifting their head out of the water during the arm recovery phase. The head remains submerged during the arm pull and leg kick.

Speed and Ergonomics: Breaststroke is the slowest competitive swimming style. Timing and coordination are crucial for efficient movement.

Underwater Pullout: After each turn and start, swimmers execute an underwater pullout. It involves a powerful arm pull and a single dolphin kick (optional as of 2024 rules).

Butterfly

The butterfly stroke is a captivating swimming technique that combines both power and grace.

Body Position: Swimmers lie face down in the water. Both arms move symmetrically, creating a wave-like effect.

Arm Movement: Both arms simultaneously push out to the sides, then sweep forward and down in a circular motion. This motion propels the swimmer forward.

Leg Movement (Dolphin Kick): The legs perform a powerful kick known as the "dolphin kick." The hips and chest move rhythmically, coordinating with the arm strokes.

Breathing: Swimmers lift their head out of the water during the arm recovery phase to breathe. Timing is crucial to maintain momentum.

Challenges: Butterfly is physically demanding, requiring upper body strength and coordination. Swimmers need endurance to sustain the intense motion.

History: Developed in 1930's, it was originally called the "dolphin" stroke.

Officially recognised as a distinct style in 1956.

Medley Relay

In individual medley events, the swimmer covers the four swimming strokes in the following order: Butterfly, Backstroke, Breaststroke and Freestyle. Each of the strokes must cover one quarter (1/4) of the distance. Leaving the wall on the back during the freestyle portion is permissible but no kicking action is permitted until the swimmer has returned past the vertical to the breast at which point kicking, including a butterfly kick(s) may commence.

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Assessment Design

Practical Assessment

S. No.	Syllabus	No of Practical	Selection for grade	Marks
1.	Physical fitness and literacy	5*	3	15
2.	Major Games	5*	3	15
3.	Track and field	5*	3	15
4.	Asana and breathing techniques	5*	3	15
Total mark				60

Evaluation Pattern of Theory Exam

S. No.	Rubrics	Mark	
1	Fill in the blanks	5 x 1	5 Marks
2	Match the followings	5 x 1	5 Marks
3	True or False	5 x 1	5 Marks
4	Short answer any five out of eight	2 x 5	10 Marks
5	Detailed answer any two out of three	2 x 5	10 Marks
6	Court/ ground marking	1 x 5	5 Marks
Total			40 Marks

* Evaluation Pattern of Practical Assessment

S. No.	Rubrics	Mark
1.	Interest	1
2.	Skill/ technique, Execution	2
3.	Efforts	1
4.	Sportsmanship	1
Total		5

Class 6-10

LEARNING OUTCOMES

Students can,

- execute day today activity without any fatigue.
- exhibit well being by synchronised body movements.
- demonstrate physical culture.
- develop healthy lifestyle.
- exhibit leadership with team work.
- exhibit strength, power; balance and stability during dangerous circumstances to save life.
- execute fundamental skills and techniques of sports and games during the competition.
- able to abide the rules of sports and games.
- exhibit sportsmanship along with emotional well-being.
- demonstrate physical, social, emotional, cognitive and cultural values.
- know various talent identification programme and sports scholarships.
- know the sports hostels in Tamil Nadu.
- able to carry out first aid for minor injuries.
- demonstrate safety measures before, after and during the game.
- can exhibit changing physical attributes, synchronised exercises and group cohesion.
- execute fundamental skills of sports and games.
- able to recognise fracture and dislocation.
- carry out first aid and seek for medical help.
- avoid injuries and be safe during and after play.
- aware of sports schemes and best sports coaching centres.
- list out various special scholarships for sports.
- able to execute advanced skills and techniques of sports and games.
- explain the need of nutritious food for health.
- list out appropriate foods that provide adequate energy.
- understand the ill effects of drugs used in sports.
- exhibit importance of balanced diet for healthy living and sports performance.
- list animal and plant-based food and traditional food for sports performance.
- avoid drug abuse in sports.
- list out the various career opportunities in sports.
- differentiate major and minor head injuries and implement safety procedure for the same.
- explore the relationship between conditioning exercises and physical fitness for well-being.
- improve neuromuscular coordination during sports and games with cardiovascular fitness.
- learn how to become an international, national and Tamil Nadu player.
- know about the higher education reservation annonced by the government for sportsperson.
- know the job opportunities of sportsperson.

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